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Leaflet Regarding Rules of Publication.—CALIFORNIA AND WESTERN MEDICINE has prepared a leaflet explaining its rules regarding publication. This leaflet gives suggestions on the preparation of manuscripts and of illustrations. It is suggested that contributors to this Journal write to its offices requesting a copy of this leaflet.

DEPARTMENT INDEX

(Itemized Index of Articles is printed on Front Cover)

EDITORIALS

"DOCTOR SHORTAGE"—WITH REFERENCE TO CALIFORNIA

"Shortage," a Word of Increasing Use.—"Shortage," defined in the dictionary as "a deficiency in quantity," is a word now-a-days heard with increasing frequency in relation to many supposed or real needs of the population of the United States. When used in the term, "Doctor Shortage,"—a caption frequently catching the eyes of readers during perusal of editorials, letters from the people, special and other articles so often appearing in the lay press, it takes on special significance, especially to members of the medical profession. Because, during recent years, so much space has been given in print to voluminous discussion of supposedly "inadequate medical care," the "Doctor Shortage" legend assumes special interest in these wartime days.

Citizens of our own country have become so accustomed to receive a high type of professional care, with hospital and other accessory aids, for the alleviation of their physical and mental ills, that it is now somewhat difficult for many persons to differentiate between essential and non-essential medical service. In other words, it is hard for them to distinguish between care sufficient to safeguard health and life, and that additional supervision that partakes of the nature of what might be called "luxury medicine and care."

Be that as it may, the members of the public will be obliged to accommodate themselves to the new order in regard to medical service, just as they are learning to readjust their habits concerning food, clothing and housing.

* * *

The Pool of Available Physicians for Civilian Practice Approximates 80,000.—With a realistic pool of about 136,000 Doctors of Medicine available for both military and civilian needs,—of whom, by now, more than 40,000 have been inducted into the Armed Services, and with some 11,500 to follow during the current calendar year,—there are left from the total of 136,000 physicians in the available pool, only about 80,000, or so, who can be used in active civilian practice.

Since a total of 176,000 physicians is listed as being in active practice in the United States (when no deductions for incapacity through age or other deficiencies are made)—it follows that the civilian population of our Country will be obliged to get along with about one-half the number of Doctors of Medicine citizens formerly

enjoyed, and,—whether they like it or not,—begin to get accustomed to the new arrangements.

* * *

Increased Work for Physicians.—It naturally follows that the new set-up throws much additional work upon the physicians who yet remain in civilian practice. However, if a clearly outlined educational program is carried through with patients, it may still be possible to prosecute medical work with very fair efficiency and no loss of standards, and meet all fundamental medical practice needs. Of course, in case of widespread epidemic or other catastrophes, the picture will have different hues. But there also, with proper foresight and planning, it should be possible to maintain organization or group effort of kind that will provide essential and basic care, both in amount and quality, sufficient to prevent unnecessary loss of life.

* * *

Questionnaire of C.M.A. Council.—The Council of the California Medical Association recently circularized the component county medical societies regarding doctor shortage problems in their respective communities. It is gratifying to know, while physicians almost everywhere are working harder than in pre-war days,—that the medical needs of the respective communities and areas throughout the State are being met in fairly adequate fashion. Further, that in a few of the places where medical service hardships seemingly do exist, the basic trouble is not so much because of inability of the attending physicians of the district to give proper care to families, but rests rather on other governmental regulations and directives dealing with supplies of gasoline, tires and traffic accessories, which prevent citizens from going to the available physician or physicians. In other words, the hardships due to such factors are being plastered on the medical profession instead of on the governmental agencies not identified with public health activities, who, really, are the blameworthy agencies.

The proponents of some socialized and state medical schemes will no doubt use existing conditions to prove that a larger number of physicians and hospitals are needed. These advocates show their incapacity to see the problem through. The mere fact that standards of public health are being maintained with 80,000 physicians instead of 176.000 Doctors of Medicine in active practice, and when also, fewer hospital beds are available,—owing to taking-over of many civilian hospitals by military authorities,—indicates how far astray the exponents of theoretical expositions on medical care have wandered from the realistic approach.

As before stated, it is gratifying to learn,—in spite of the fact that 40,000 to 50,000 of our younger Doctors of Medicine are now with the Armed Forces,—that the maintenance of health and conservation of life of our fellow citizens throughout the Union has been and is being maintained in quite satisfactory manner. As actual needs arise, means will undoubtedly be found to meet the situations.

ANNUAL SESSION IN LOS ANGELES—SUNDAY, MAY 2 AND MONDAY, MAY 3, 1943

Important to Make Transportation and Hotel Reservations.—A two-day, streamlined annual session, to be held in Los Angeles on Sunday, May 2nd and Monday, May 3rd, with Hotel Biltmore as headquarters, received editorial comment in the December issue of CALIFORNIA AND WESTERN MEDICINE.

The general plan then outlined will be carried through. All indications point to a successful gathering. The attendance should be good because the Los Angeles County Medical Association, with a membership of some 2,826 physicians in itself is sufficiently large to make possible an excellent registration.

Sunday, for the first time, has been selected as the opening day of an annual session, since it will be more convenient for physicians to arrange their work for a brief two-day vacation over Saturday, Sunday and Monday, than during other days of the week.

In the January number of CALIFORNIA AND WESTERN MEDICINE, on pages 32-34, a preliminary list of hotels with rates, and of transportation schedules, was given. It is important for all who wish to travel or to make hotel reservations that these be arranged well in advance. *Do not neglect to make these reservations.*

* * *

Skeleton Form of Scientific Program.—The scheduled arrangement of the program as finally decided upon, contemplates three general meetings: a meeting on Sunday morning, especially for reports of officers and topics related to organized medicine, such as medical service and hospitalization problems; on Sunday afternoon, medical and surgical topics; and on Monday morning, medical and surgical subjects, and clinical-pathological conference.

Concerning the phases of medicine and surgery upon which emphasis will be placed, the Committee on Scientific Work has agreed to stress the following:

1. Communicable Diseases (tropical and diseases such as typhus, influenza, and malaria).
2. Practical Points in Civilian Disaster Relief (with consideration of problems actually found important in disaster):—burns, shock, and other major points in disaster management.
3. Nutrition Problems, in relation to food shortage and other conditions.
4. New Problems in Wartime Industry.

Guest speakers, whose names are well known in medical literature have been invited. The "Pre-Convention Bulletin" which appears in the April issue of CALIFORNIA AND WESTERN MEDICINE, will give detailed information.

The twelve scientific sections will hold their group meetings on Monday afternoon, at which time papers and discussions on pertinent topics, and election of section officers, will take place.

Medical and surgical films will be shown in the Music Room (during the times of the general meetings) for members who have special interest therein. Hour of the appearance of each of the films will be scheduled. No general scientific exhibits will be displayed this year, nor will there be a presentation of technical or commercial exhibits. (Members who have made medical films are urged to inform the Association Secretary.)

The meeting room arrangements in the Hotel Biltmore are excellent. In fact, they are as good or better than those at Hotel Del Monte, even with the recent assembly room additions.

The "Dinner to the President" will be held on Sunday evening, in the celebrated Biltmore Bowl. It is believed that there will be a large attendance of members and their ladies, since in these wartime, rationing days, a "dinner out" becomes a function of special interest. In due course, complete information concerning the program and other arrangements will appear in the "Pre-Convention Bulletin" in the April number of CALIFORNIA AND WESTERN MEDICINE.

Members who doubt the advisability of even a brief, two-day annual session may care to read what the *New York State Journal of Medicine* recently stated concerning its own medical meeting at a time when our Country is at war. Quotation follows:

> This year's annual session "will be the second such meeting in wartime and should be attended by all who can possibly be there; yes, and even by those who for some reason think they can't! We know it will be difficult—use of cars restricted, train travel onerous, bicycles rationed, too far to walk, limited hitching and stable facilities for horses, too expensive to fly, canal boats and barges not running on regular schedules. Conditions were worse in grandfather's day, but he came in large numbers, and so will you.
>
> "Much has happened since we met last spring, much that you will want to hear about: war medicine and surgery, new treatments, new instruments, changes in methods of practice, what the profession in various parts of the State and elsewhere is doing and planning to meet its particular needs. . . .
>
> "Make your plans now to come. Later we shall tell you more of the scientific program, but just now we ask you to note the dates and to lay your plans to come."

Sunday, May 2nd and Monday, May 3rd, 1943, in Los Angeles, at Hotel Biltmore—write down the dates *now* in your engagement book. Then watch CALIFORNIA AND WESTERN MEDICINE for further announcements.

CALIFORNIA'S MINERAL SPRINGS: JOINT RESOLUTION BY THE CALIFORNIA LEGISLATURE URGING THEIR USE

Purpose of the Joint Resolution.—In this issue appears a joint resolution, unanimously approved by both the Senate and Assembly of the present California Legislature, in which the Federal military and other authorities are urged to consider the advantages which would accrue to patients, if one or more military hospitals were erected in some of the mineral spring areas of the State. (For text of resolution, see page 137.)

In calling attention to the joint resolution, it may be stated that physicians of California were apparently more interested in the value of mineral springs a half century and more ago, than they seem to have been during recent years.

* * *

Some References to California Literature.—In checking the literature, the following comments by Doctor A. Rice on the subject of mineral springs and resorts were found in the *Southern California Practitioner* of January, 1887:

1. Physicians, individually or in committee, should make careful analysis of our mineral waters.

2. The medicinal value of the waters should be tested by clinical investigation, and studies upon patients, and the conclusions arrived at given to the profession.

3. If the waters are found to possess marked medicinal merit, physicians should interest themselves in the development of the springs and the improvement of bath-houses and apparatus.

4. Physicians, in sending patients to a mineral spring, should be most careful to select the proper water, and should send, with the patient, his history and the diagnosis of his disease, for the benefit of the physician at the bath.

5. Patients at our mineral spas should be placed under more rigid medical discipline, and more attention should be paid to their habits of living.

6. The social life at our watering-places should be placed on a more wholesome basis.

Joseph Pomeroy Widney, founder of the *Southern California Practitioner*, and motivating spirit in the group of founders of the Los Angeles County Medical Association, who passed on several years ago at the advanced age of 96, contributed numerous articles of like nature.

In the San Francisco Bay Region, among authors who have written on the same subject, reference may be made to the late Doctor Winslow Anderson, whose book, "Mineral Springs and Health Resorts of California," a volume of 384 pages, was brought off by the pioneer Bancroft Press in 1892, winning special recognition in the "Prize Essay and Annual Prize Contest of the Medical Society of the State of California," and being so awarded on April 20, 1889. Its entire contents are devoted to chemical and other analyses and descriptive matter of the many mineral springs existing in California.

Another article from the *Southern California Practitioner* appeared in the December, 1887, issue, its author being J. W. Robertson of the Napa Asylum. A brief excerpt therefrom follows:

> California has but recently attracted the attention of sanitarians. This tardy recognition was partly due to its isolation, partly to the fact that the Argonauts looked not at the sky, but at the earth, and cared nothing for scenery, climate or a pure atmosphere. The Coast belt contained no gold, therefore they ignored it. Southern California, where now bloom perennial orange groves and the rarest exotics, they pronounced a desert scarcely able

to support a meager growth of sage brush and cactus,—a fit habitation for the coyote. Only recently has the fact been borne in mind that something is to be found more precious than gold, and from all over the world thousands of invalids flock here. Our people have not realized that California has a cosmopolitan climate adapted to all diseases that can possibly be benefited by change of air; that within its borders are to be found the altitude of the Alps, the scenery of Switzerland, the fruits of the tropics, numerous mineral springs which equal in value and are more healthfully situated than are those of the Eastern United States or Europe; the pure air of the Colorado Highlands and the winter climate of Florida; and that it is a nice question to always properly decide on that location best situated to relieve their particular disease. People do not always choose wisely.

* * *

Article by Henry E. Sigerist of Johns Hopkins.—More recently, in the *Bulletin of the History of Medicine* (Vol. XI, No. 2, February, 1942), the well-known Henry E. Sigerist, M. D., a member of the Johns Hopkins University School of Medicine, discussed the curative aspects of mineral springs in general and those of America in particular. So pertinent are the comments, that liberty is taken to reprint some of his opinions:

To the European physician who comes to America it is very striking to find what little use this country is making of its mineral springs. The situation is so totally different from that which prevails in Europe that it calls for an analysis. . . .

Medicinal springs and their curative powers are mentioned by ancient and mediaeval medical writers. . . .

The European spas have been used for over 2,000 years. Medical theories changed. . . .

But whatever the theories were, patients for over 2,000 years went to the spas, bathed in their waters, drank them and found relief. Every medical theory was used to explain the effect of medicinal waters. The explanations changed, but there were always results. In every century patients were benefited by their cures. . . .

It is very unscientific to deny the experience of 2,000 years merely because we have no ready-made theory that explains all phenomena in every detail. It would have been foolish to deny the existence of lightning because electricity was not yet known. Experience has preceded science in medicine more than once. Our most valuable drugs, quinine, digitalis, opium, mercury and many others were given for centuries, long before pharmacology was able to explain their action. Oskar Baudisch has very pertinently shown how similar the situation was with regard to heliotherapy. Sunlight was used as a healing agent for centuries. Rickets were treated with ultraviolet rays. To "scientific physicians" this was a mere superstition—until the vitamins were discovered and it was found that sunlight changes the ergosterol of the skin into vitamin D. Chemistry until recently was gross chemistry; microchemistry is in its infancy still, and we are beginning to realize that a few molecules of a chemical compound can cause definite biological reactions. . . .

I would like to make a strong plea for the development of our American health resorts. We need them, not because European resorts are unavailable at the moment. There is no reason why our patients should have to go to Europe for such treatments. We need them because the chronic diseases, the diseases of mature and old age are in the foreground, our major health problems today. We shall need them badly after the war, not only for the veterans of the armed forces, but also for the veterans of labor. . . .

* * *

California's Mineral Springs Deserve Promotion.—The 400 or more mineral springs of California are among the great natural resources of the State, still awaiting development. The California State Chamber of Commerce, during the last four years has placed the subject on the program of one of its Sections, the writer having presented three addresses on the topic. Two years ago, a "League for the Development of California's Mineral Springs" was formed, to aid in the work. It was hoped that a movement such as the Redwood League might be started, through which some of California's major forest attractions were saved from destruction.

This year, with the 55th Legislature in session, it has been possible to bring about the adoption of the joint resolution which appears elsewhere in this issue. A perusal of the resolution indicates its purpose:—to urge the constituted Federal authorities to use one or more of California's mineral springs areas as reservations on which could be erected hospital structures, so that spa therapy of scientific standards may be made available to wounded and sick soldiers and sailors, whose convalescence would thereby be promoted and expedited.

If California's mineral springs can so be developed with spa environments in accord with the best experience and standards, their fame will bring thousands of additional visitors to the State, to the benefit not only of the patients, but to the material and other interests of the Commonwealth.

California medicine would profit greatly through the establishment of such institutions. It is hoped that increasing interest will be given to the subject by physicians.

EDITORIAL COMMENT†

ANTIMALARIAL VACCINE AND SERUM THERAPY

An important contribution to the basic theory of antimalarial immunity is contained in a study of the efficacy of prophylactic injections of nonviable malarial sporozoites, currently reported by Russell and Mohan,[1] of the Pasteur Institute, Coonoor, India.

The animals used in this study were domestic fowls inoculated with Plasmodium gallinaceum. Each fowl was infected by the bites of two Aëdes albopictus mosquitoes, which had ingested an infective blood meal 15 days previously. The insects were maintained at 80° F and 80 per cent humidity during the 15-day period. All normal

† This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comments by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California Medical Association to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

birds thus bitten developed parasites in the blood after a prepatent period of from 8 to 10 days, the average incubation period being 9.1 days. The percentage of infected red blood cells averaged less than 1 per cent at this time, increasing to 11 per cent by the 12th day, to 35 per cent by the 14th day, and to 62 per cent on the day of death, death usually taking place by the 20th day. The mortality rate varied from 40 to 100 per cent in the different groups, averaging 55.4 per cent in all groups. In nonfatal cases the parasite count usually reached its maximum between the 12th and 18th day, and then decreased, the blood becoming free of parasites by the 24th day.

Nonviable vaccines were prepared from ground dried thoraces of mosquitoes that had taken an infective blood meal 15 days previously. Each fowl received five intravenous injections at 5-day intervals of a saline suspension of 40 emulsified thoraces. In each case the agglutinating titer of the fowl's serum for homologous sporozoite suspensions rose to an average of 1:100.000 by the day of experimental inoculation. Following the bites of two infected mosquitoes, parasites appeared in the blood of all vaccinated birds. Less than 1 per cent counts were recorded on the 8th and 10th day, increasing to from 5 to 13 per cent infection by the 12th to 14th day. In 70 per cent of the vaccinated fowls the count then decreased, full recovery being recorded by the 20th day. In 30 per cent of the vaccinated birds the count continued to rise to about 60 per cent by the 14th day, death occurring on the following day. The average maximum count in all vaccinated birds was 20 per cent, as contrasted with a 43 per cent average in the nonvaccinated controls. The mortality rate of 30 per cent is also in contrast with the control mortality rate of 55.4 per cent. Both mortality and severity of the infection were thus reduced one-half as a result of prophylactic immunization. In no case, however, was the infection prevented by the sporozoite vaccine nor the incubation period appreciably prolonged.

Supplementing their study of active immunization, Russell tested the efficiency of a passive transfer of acquired malarial immunity. A group of normal fowls were each given 7 daily intraperitoneal injections of 1 c.c. of pooled serum from a number of fowls having chronic malaria due to homologous plasmodium. After the third immune serum injection, each fowl was bitten by two infective mosquitoes. All contracted malaria. The average latent period was 8.2 days, as contrasted with 9.1 days in the control birds. The mortality rate was reduced to 25 per cent.

Tests were also made of the possibility of combining both active and passive immunization. A number of fowls were given routine doses of the sporozoite vaccine, and afterwards injected intraperitoneally or intravenously with pooled serum from fowls having chronic homologous malarial infections. The pooled serums had an average sporozoite agglutinating titer of 1:180,000. Each fowl was afterwards bitten by two infectious mosquitoes. The combined data from all series thus tested showed an average mortality rate of less than 10 per cent. In no cases, however, was the disease prevented by this combined immunization nor the latent period appreciably prolonged.

The fact that in no case in Russell's multiple tests was malarial infection prevented by active, passive or combined immunization, suggests that immunoprophylaxis is of little or no promise in the epidemiological control of malaria. Although both severity and mortality were reduced as a result of active or passive immunization, the clinical results were not superior to those obtained with routine antimalarial drugs. The work is being continued largely for its theoretic interests.

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AVITAMINOTIC HYPERTENSION

A challenging new theory of the mechanism of renal hypertension is suggested by Calder,[1] of the Clayton Foundation for Research, Duke University, in his recent demonstration of the causal relationship between persistent arterial hypertension and vitamin B_2 deficiency.

The discovery by Goldblatt[2] that experimental renal ischemia is followed by persistent arterial hypertension has led to a generally accepted theory as to the mechanism of renal hypertension. According to this theory,[3, 4] incomplete oxidation of amino acids in the ischemic kidney leads to the formation of intermediary pressor-amines, which in the normal kidney are completely oxidized to nonpressor end-products. The effective etiologic mechanism, therefore, is a diminished oxidative capacity of the kidney. If so, intermediary pressor-amines should also be formed as a result of any other factors reducing the oxidative capacity of the kidney parenchyma. It is generally accepted that the vitamin B complex furnishes essential components of several respiratory enzymic systems. It would logically follow, therefore, that vitamin B deficiency might cause a sufficient decrease in the oxidative capacity of the kidney to give rise to the same hypertensive amines.

To test this possibility Calder maintained numerous groups of rats on various B deficiency diets, and recorded the weekly changes in blood pressure, the experiments usually extending over a period of from 2 to 4 months. In most cases the blood pressure was estimated by the Williams[5] indirect method. In a few animals the pressure was also determined directly by inserting a cannula into the abdominal aorta. The two methods gave practically identical results.

Among Calder's most significant data are his studies of the effects of partial or complete deprivation of "vitamin B_2 complex." This he de-

ORIGINAL ARTICLES

Scientific and General

BRONCHIOGENIC CARCINOMA: THE RÔLE OF BRONCHOSCOPY*

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Oakland

BY means of the bronchoscope we are able to inspect directly the lumen of the tracheobronchial tree. In many problems of thoracic disease bronchoscopy is an important supplement to other methods of study, particularly the physical and roentgenographic examinations. To look at, to look through, and to look into, might be called the first three commandments for proper intrathoracic diagnosis. Skill is demanded in performing a bronchoscopy; likewise the operator must be able properly to interpret his findings. This predicates a first hand knowledge of tracheobronchial anatomy and pathology. Bronchoscopists whose experience is limited to the occasional extraction of foreign bodies often lack this ability. In skilled hands endoscopic procedures are of only passing discomfort to the patient and the hazard is minimal.

In the thorough study of any patient suspected of having pulmonary cancer, bronchoscopy inevitably follows the history, physical examination, laboratory and roentgenographic studies.[1] Even with negative roentgenographic findings bronchoscopy is indicated if the patient continues to cough, wheeze or expectorate blood-streaked sputum.

The bronchoscopic picture of carcinoma varies widely. Perhaps most usual is the soft, fungating, exuberant type which partially or completely fills the bronchial lumen. The growth may be polypoid or sessile. Pseudo-membranous exudates are common. In color, the tissue varies from greyish-yellow to deep red depending upon the amount of necrosis or vascularity. There is moderate bleeding on manipulation. Shallow hemorrhagic ulcers ("ulcerating carcinoma") with raised, indurated borders are occasionally seen. With proximal extramural extension a bronchial stenosis may be present which interferes with adequate visualization of the primary growth.

It must be remembered that there can be no positive diagnosis of cancer until it is proven under the microscope. A biopsy, therefore, must be procured. Tissue may be obtained by several means. In most cases the writer prefers foreign body cup-forceps by which tissue can be scalped or teased off the main mass. There is less bleeding than when using the usual type of basket forceps which have a cutting edge. The latter may be necessary when the tissue is firm. When very flattened growths are encountered, or the actual endobronchial lesion is beyond a stenosis, it may be advantageous to obtain tissue by endoscopic curettage.[2] Long, sharp curettes have been successfully employed in a number of cases when ordinary forceps failed. An attempt always should be made to secure sufficient tissue for examination, but gentleness is imperative. A carelessly performed biopsy increases the danger of severe hemorrhage or perforation of the bronchial wall. Should the *microscopic* evidence of carcinoma be inconclusive, further bronchoscopic biopsies are demanded within a short time. A positive biopsy should eventually be obtained in approximately three out of four cases.

Special problems arise in bronchoscopic diagnosis. Tumors arising in the upper lobar bronchus ordinarily cannot be seen unless they protrude into the stem bronchus. Here, a retrograde telescope passed through the bronchoscope is used to advantage. Subsequent angulation of the lobar bronchus can be produced by pneumothorax which may facilitate direct vision and biopsy. Lower lobe shadows should be carefully localized by frontal stereoscopic and lateral roentgenograms. Should the lesion then *not* be visualized at bronchoscopy, careful blind probing with curette or cup forceps may be productive of tissue. Small strings of bloody exudate and sputum should be aspirated into a specimen bottle and fixed for paraffin section. A biplane fluoroscope also has been used for localization at the operating table.[3]

Differential diagnosis is necessary from the following diseases. Pulmonary tuberculosis occasionally is complicated by granulomatous or stenotic bronchial lesions. In general, tuberculous granulation tissue is more avascular than cancer. The lesion nearly always continues into a lobar bronchus. If the sputum has been negative for tubercle bacilli prior to bronchoscopy but tuberculosis is suspected later, a postbronchoscopic, 48-hour sputum specimen should be subjected to further search. The possibility of a bronchial foreign body always should be kept in mind. Nonspecific pneumonitis, bronchiectasis and abscess may result in bronchial granulation tissue. It is flattened or polypoid, dull red in color and vascular. It is often localized in the stem bronchus opposite the lobar orifice which drains the infected area in the lung. There will be spontaneous regression as the pulmonary infection improves. Tumors of the adenoma type are partially to completely obstructive, round or oval in shape and of a reddish color. The surface may be smooth, having the appearance of a capsule. Usually there is excessive bleeding when a biopsy is taken.

It is generally agreed that the best chance for cure in primary carcinoma of the lung lies in radical surgery, that is, total removal of the lung.

* Presented as part of the State Cancer Committee Symposium on Primary Carcinoma of the Lung at the annual meeting of the California Medical Association, Del Monte, California, May 5-8, 1941.

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fines as "the heat-stable fraction of the total vitaman B complex." Starting with an average blood pressure of 115 mm. Hg, a group of 50 rats showed a rise to 145 mm. Hg blood pressure when partially or completely deprived of the vitamin B_2 fractions. This rise was reached by the end of the second week and was maintained for 16 weeks (end of experiment). At any time during this period the blood pressure could be reduced to normal by restoring the heat-stable vitamin B factors to the diet. Significantly, partial B_2 deficiencies were followed by higher rises in blood pressure than those produced by a complete deficiency. This Calder explains as probably due to the debilitating effects of total deprivation of B_2 factors.

Even more pronounced debilitating effects were noted in several groups of rats which received no vitamin B whatsoever. These showed a slight (10 mm.) rise in blood pressure during the first week of complete B avitaminosis, followed by a fall in arterial pressure to below normal by the end of the second week. When this hypertensive deficiency diet was fortified by the addition of thiamin, there was a rapid rise in blood pressure to 142 mm. Hg by the end of two weeks.

Incidentally it was noted by the Duke University physiologist that his experimental hypertensive rats were very intolerant of ether, a few whiffs administered for the purpose of deepening the anesthetic effects of nembutal often proving fatal. The hypertensive rats were also unusually susceptible to shock.

While Calder's results are in seeming confirmation of his postulated avitaminotic reduction in the oxidative capacity of the kidneys, he is careful to emphasize the possibility that other metabolic abnormalities may conceivably play a part. Detailed studies of kidney functions will be necessary to prove the suggested avitamotic renal theory. From a practical point of view, however, demonstration that the hypersensitive state may be symptomatic of "vitamin B_2 complex" deficiency has numerous important clinical applications. Other types of deficiency are now under investigation in Duke University.

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FELINE INFLUENZA IN MAN

Recently several clinicians have reported a possible epidemiologic connection between certain atypical pneumonias in man and a respiratory tract infection of cats, variously designated as nasal catarrh, influenza or distemper. Evidence that these two diseases are due to the same virus is currently reported by Baker[1] of the Rockefeller Institute. Suspensions of lungs from cats showing typical influenza symptoms with pneumonia were inoculated intranasally into mice. The mice became sick in the first passage, and many of them died in from 3 to 5 days. Necropsy showed a definite pneumonia with more than half the lung involved. Mouse-to-mouse serial passage increased the virulence of the infectious agent to a point where death occurred in 2 to 3 days, following intranasal inoculation. Control tests from normal cats and uninoculated mice were invariably negative.

Cultures from the lungs of naturally infected cats and of artificially infected mice showed few bacteria and were frequently negative. The infective agent, transferred to the yolk sac of 5-day incubated eggs, usually killed the embryo in from 2 to 3 days. When suspensions of the inoculated yolk sac membranes were given intranasally to normal kittens a typical disease was produced, which was readily transferred by contact to other kittens. All attempts failed to demonstrate a cultivable bacterium from the yolk sac, suggesting that the infectious agent is presumably a virus. Attempts to pass the agent through Berkfeld filters gave irregular results. Sections of the yolk sac membranes and smears from lungs of infected mice revealed numerous elementary bodies similar to those of psittacosis. High speed centrifugation concentrated much of the infectious agent in the sediment, suggestive evidence that the observed elementary bodies are carriers of the etiological agent.

Complement fixation tests were made using this concentrate as antigen. Sera obtained from cats before infection failed to fix complement with this antigen. Convalescent cat serums, however, gave strongly positive reactions. Serums drawn from man during the acute and convalescent stages of the atypical pneumonia also fixed complement in relatively high dilution. Most control normal human serums were negative or gave relatively low positive reactions. From this evidence Baker concludes that the respiratory disease in cats is due to a virus that forms elementary bodies and that this virus is the same as (or is closely related to) the one causing some of the so-called atypical pneumonias in man. Further work is in progress.

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While a child is acquiring an education he should be doing things he will have to do while he is earning a living.—H. Ford.

"There are some men who lift the age which they inhabit—till all men walk on higher ground during that lifetime."—Maxwell Anderson.

In regard to the etiology of the condition, there are three generally accepted causes: first, obstruction of the tube, either from within or without; second, anomalies of the tube, such as polyps, diverticula, or accessory ostia; and third, external migration of the ovum—that is—the passage of the egg from the ovary on one side, to the tube on the opposite side.

Ectopic pregnancy may terminate in one of several ways. It may terminate in the early death of the fetus, with complete resorption and without harm to the patient. Or, the pregnancy may end in the early death of the fetus with the formation of a so-called tubal blood mole, in which there is only a blood clot in the tube, and, when it is observed microscopically, only occasional shadows of chorionic villi are seen. The pregnancy may also terminate in tubal abortion, in which case the products of conception are expelled from the fimbriated end of the tube. Or, finally, the pregnancy may terminate in the rupture of the tube. In rare instances, following tubal rupture, the placenta may attach itself to adjacent structures, and the pregnancy then develops as an abdominal one.

The symptoms and signs of ectopic pregnancy may be briefly outlined as follows. There is almost invariably a history of irregular menstrual bleeding, with or without a short period of amenorrhea. Nausea, breast changes, and the other indefinite signs of pregnancy are usually present. Pelvic pain is present, although it may be slight. When tubal rupture or tubal abortion occurs, the pain becomes much more severe. A tender mass can generally be detected in one or the other adnexal regions. In cases where massive hemorrhage has occurred there are the usual signs of shock, and the white blood count is elevated. Abdominal rigidity and the other signs of peritoneal irritation are fairly constant findings. There is one other sign which is often overlooked, namely shoulder-pain. This sign is present in a considerable number of patients, and is, of course, due to the presence of blood beneath the diaphragm.

From an historical standpoint it is interesting to note that the first operation for an abdominal pregnancy was performed in the year 1500, when Jacob Nufer, a swine-spayer, operated upon his own wife. Similar operations were occasionally performed in the next 300 years, but it was not until 1883, just fifty-nine years ago, that Lawson Tait performed the first laparotomy for a ruptured tubal pregnancy. Tait's first patient died, and he was roundly criticized; but in spite of this he operated upon forty more patients with ruptured tubal pregnancy, and only one died. This record compares very favorably with modern results, as the figures presented in this paper will show.

SOURCE MATERIAL

This study is based upon all of the cases of ectopic pregnancy which were operated upon at the Huntington Memorial Hospital in Pasadena, between June 1, 1933 and June 1, 1941. In all there were a total of sixty-five cases and these sixty-five patients were cared for by twenty different surgeons. In all of these patients the ectopic pregnancy was a tubal one. In thirty-one patients the tube had ruptured, in twenty-two patients tubal abortion had occurred, and in the twelve remaining patients the tubal pregnancy was unruptured, and there was no sign of tubal abortion.

TABLE 1.—*Diagnosis*

	Correct		*Diagnosis Suspected*		*Incorrect*	
	Cases	*Per Cent*	*Cases*	*Per Cent*	*Cases*	*Per Cent*
Ruptured (31 cases)	17	54.8	7	22.6	7	22.6
Tubal Abortion (22 cases)	9	40.5	10	45.4	3	14.1
Unruptured (12 cases)	4	33.3	1	8.3	7	58.4
Total	30	46.1	18	27.7	17	26.1

The percentage of correct diagnoses in these cases is shown in Table 1. It will be noted that the number of correct diagnoses is considerably higher in those patients who had a ruptured tubal pregnancy or tubal abortion, than it was in those who had an unruptured tubal pregnancy. This is to be expected, since the symptoms are much more acute in the patient with hemoperitoneum. In 27.7 per cent of the total number of cases the diagnosis of ectopic pregnancy was mentioned as one of two or more possibilities. These are the cases listed in the column labeled "Diagnosis Suspected." In 26.1 per cent of the patients the correct diagnosis was not even mentioned as a possibility.

TABLE 2.—*Incorrect Diagnoses*

	Ruptured	*Tubal Abortion*	*Unruptured*
Acute Appendicitis	6	2	0
Chronic Appendicitis	0	1	3
Ovarian Cyst	2	2	2
Ovarian Cyst with twisted pedicle	2	1	0
Acute Salpingitis	2	1	0
Chronic Salpingitis	1	0	2
Uterine Fibroid	2	0	0
Intestinal Obstruction	1	0	0
Incomplete Abortion	0	1	3

Table 2 consists of a list of the various conditions which were confused with ectopic pregnancy. It is apparent that acute and chronic appendicitis head the list, while ovarian cyst, with or without twisted pedicle, is in second place.

So far as the etiology of the condition is concerned, two factors were considered in this study. First, an attempt was made to correlate the incidence of ectopic pregnancy with the parity of the patient. In this series 43 per cent occurred in primiparae, 44.6 per cent occurred in multiparae, and in the remaining 12.3 per cent the number of pregnancies was not recorded in the history. Since this is approximately the same ratio that obtained on the maternity ward during the same period, it

Lobectomy is almost never adequate and should be condemned as an operative choice. One of the most important functions of bronchoscopy is to aid in the determination of operability. For this reason it is advisable for the thoracic surgeon to perform his own bronchoscopic examinations. He should decide by personal inspection whether or not pulmonary resection should be attempted. As the bronchoscope is passed the vocal cords are examined first. The presence of recurrent laryngeal paralysis usually means that neoplastic infiltration has occurred outside the bronchial wall, rendering a successful excision (pneumonectomy) very unlikely. The main bifurcation of the trachea (carina) normally presents as a sharp or slightly blunted edge and has an elastic feel when pressed with tip of the bronchoscope. If the carina is widened or fixed, it strongly suggests the presence of metastases in the adjacent mediastinal lymph nodes. This finding would contraindicate operation. The bronchial wall proximal to the neoplasm may show changes. Induration, stenosis, fixation or deformity means the presence of submucosal or extrabronchial neoplastic encroachment. The surgeon-bronchoscopist must estimate whether it will be possible to resect the bronchus far enough proximally to get beyond the growth. Should there be induration or distortion of the lower lateral tracheal wall it is probable that the lung cannot be successfully removed even though the visible endobronchial growth is some centimeters distal in the stem bronchus. If there is any question of esophageal involvement, an esophagoscopy can easily be performed at the conclusion of the bronchoscopic examination.

Definitive treatment of bronchial carcinoma through the bronchoscope has not proven satisfactory. It now seems probable that in earlier reports of cures by endobronchial excision, the lesion in question was a bronchial adenoma and not carcinoma. When pneumonectomy is contraindicated, palliative endobronchial radiation therapy can be tried. Radon seeds may be implanted directly into the growth through the bronchoscope. In the writer's experience this has been followed by temporary improvement in two cases. Radium may also be introduced through the bronchoscope for a given period by means of a small cylindrical "bomb."

Finally, the bronchoscope is very effective in improving pulmonary drainage when chronic pulmonary infection exists distal to an obstructing neoplasm. Exuberant tissue is removed, the lumen gently dilated, retained secretions are aspirated and the mucosa shrunken. It has been our repeated experience that the establishment of a more adequate air-way renders the patient a much better risk for major surgery. Toxicity, cough, and fever are greatly reduced, there is improved appetite and the patient's sense of general well-being is considerably heightened.

SUMMARY

1. Bronchoscopy with biopsy is the most important single procedure for the *positive* diagnosis of primary cancer of the lung. In most cases microscopic proof of malignancy can be obtained in no other way. Since bronchiogenic carcinoma can be cured by radical surgery (total pneumonectomy) it is imperative that the diagnosis be established as early as possible.

2. In skillful hands bronchoscopy is of passing discomfort only and carries little hazard for the patient. The examination must always be strongly urged when the suspicion of a bronchial neoplasm arises.

3. It is of great importance that the thoracic surgeon be able to perform his own bronchoscopies and estimate for himself the question of operability.

4. In differential diagnosis bronchial cancer must be distinguished from tuberculous bronchitis, local foreign-body reaction, the bronchial sequelae of pulmonary suppuration, benign tumors (especially adenoma) and nonspecific bronchostenosis.

5. Attempts at total bronchoscopic excision and endobronchial radiation therapy have failed as curative measures in bronchiogenic carcinoma.

6. Bronchoscopy establishes more adequate drainage for the pulmonary suppuration which so often occurs distal to an obstructing neoplasm. This is of great value in reducing the operative hazard when pneumonectomy is contemplated.

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ECTOPIC PREGNANCY*

A REVIEW OF SIXTY-FIVE CASES OCCURRING IN A GENERAL HOSPITAL OVER AN EIGHT-YEAR PERIOD

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AN ectopic pregnancy is any pregnancy occurring outside of the uterus. The pregnancy may be located in the tube, in the ovary, or in the abdominal cavity, and even rare instances of cervical pregnancy have been recorded.

The occurrence of this condition has sometimes been the cause of very dramatic episodes in the lives of both patient and physician. And since none of us sees a great many patients with this disease, and since the condition is one in which most of us have at least some interest, it might be well to outline briefly some of its more important characteristics.

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is apparent that in this rather small series the parity of the patient does not seem to be an important etiological factor. The second factor studied was the history of previous pelvic infection. In this series 13 patients, or 20 per cent of the total, gave a history of some type of pelvic or intraabdominal infection. Six patients gave a history of gonorrhea, six gave a history of puerperal or general peritoneal infection, and one had a tuberculous salpingitis. In this series at least, previous infection appears to have been a very definite factor in causing the abnormal pregnancy.

TABLE 3.—*Pain*

	Absent	*Intermittent*	*Constant*	*Total*
Ruptured	1	13	17	31
Tubal Abortion	3	15	4	22
Unruptured	0	8	4	12

Irregular Menstrual Bleeding

	Absent	*Present*	*Not Recorded*
Ruptured	3	28	0
Tubal Abortion	4	15	3
Unruptured	0	11	1

TABLE 4.—*Nausea and Vomiting*

	Present	*Absent*	*Not Recorded*
Ruptured	7	23	1
Tubal Abortion	1	19	2
Unruptured	0	10	2

Shoulder-Pain

	Number of Cases
Ruptured	5 (16.1%)
Tubal Abortion	3 (13.6%)
Unruptured	0

Tables 3 and 4 show the occurrence of the more common symptoms in this series. It will be noted that pain and irregular menstrual bleeding were present in the very great majority of cases. It is also interesting to note that those patients who had a ruptured tubal pregnancy were apt to have a constant type of pain, whereas in those who had a tubal abortion the type of pain most commonly complained of was intermittent, or crampy. This is apparently due to the peristaltic action of the tube in attempting to expel the ovum. Nausea and vomiting were rather uncommon symptoms. In eight of these patients shoulder-pain was noted. This symptom is probably more common than these figures would indicate, as in many cases no attempt was made to elicit its presence or absence.

TABLE 5.—*Pelvic Mass*

	Present	*Absent*	*Not Recorded*
Ruptured	16	7	8
Tubal Abortion	12	1	9
Unruptured	8	3	1

Shock

(Systolic pressure below 100 and Pulse over 100)

	Number of Cases
Ruptured	13 (42.0%)
Tubal Abortion	5 (22.7%)
Unruptured	0

Table 5 indicates the chief clinical findings in this series. A definite pelvic mass was discovered in 36 patients, no mass was felt in 11 patients, and, unfortunately, in 18 of these 65 patients, no pelvic or rectal examination was recorded on the chart. In most of these 18 patients a pelvic examination had been performed by the attending surgeon in his office or in the patient's home, but the findings were not recorded on the hospital record by the intern. However, it goes without saying, that any woman subjected to laparotomy for any cause whatever, should first have a careful pelvic or rectal examination. In this series there were 18 patients who showed varying degrees of shock, and, of course, most of them were among those who had actual tubal rupture.

TABLE 6.—*Surgical Treatment*

	Ruptured	*Tubal Abortion*	*Unruptured*
Salpingectomy	17	10	8
Salpingo-oöphorectomy	11	7	1
Bilateral Salpingectomy	1	4	0
Salpingectomy and Hysterectomy	2	1	1
Incidental Appendectomy	5	8	8
Uterine Suspension	2	1	0
Dilatation and Curettage (Diagnostic)	3	4	4

Table 6 indicates the various surgical procedures carried out on the patients in this series, and it is to this chart that we should pay particular attention. It is obvious from the very nature of ectopic pregnancy that the only essential surgery is either simple unilateral salpingectomy, or occasionally, unilateral salpingo-oöphorectomy. It is apparent from a study of this series that it is common practice to perform a good deal of incidental surgery on these patients. It should be emphasized that numerous authorities have shown that this is a very dangerous practice, and that if it is continued over a long enough time it will invariably result in the death of some patients. The best surgical treatment for patients with ectopic pregnancy is the removal of the affected tube, and the removal of that organ only, in the shortest time possible. And it might also be added that the tube should be removed completely, since, if it is not, another ectopic may occur in the tubal stump.

In this series of sixty-five patients, transfusion was employed in twenty-eight instances. Thirteen of these were autotransfusions. No serious reactions were recorded. The Friedman test was used in nine patients. It was negative in one case sixteen days prior to tubal rupture, and was positive on the day following operation. In the remaining eight cases the test was positive, and was of considerable diagnostic value.

The average hospital stay in this series was thirteen days. There was one serious postoperative complication—a case of intestinal obstruction. The patient made an uneventful recovery after release of the obstruction.

Table 7 shows mortality statistics as given out by various investigators. In Parry's series, pub-

lished in 1876, before the surgical treatment of ectopic pregnancy, the mortality was 77.2 per cent.

TABLE 7.—*Mortality Statistics*

	Cases	*Deaths*	*Per Cent*
Parry (1876) ..... Philadelphia	500	386	77.2
Graffagnino, et al (1922-36)... New Orleans	445	51	11.4
Langman & Goldblatt (1930-36) New York	310	8	2.6
Weil (1931-36) ..... Akron	100	5	5.0
Lisa, Alessi, & Solomon..... New York (1922-39)	115	5	4.3
Schauffler & Wynia (1931-41). Portland	65	2	3.0
Miller (1940) ..... New Orleans	137	3	2.1
Huntington Memorial Hosp.... Pasadena (1933-41)	65	0	0.0

It is apparent that the mortality rate in this condition is gradually decreasing, and it is now somewhere between two and five per cent. In the series reported here there were no deaths, and, while in most instances this was due to prompt treatment and good judgment, yet in some of the cases the survival of the patient must, in all fairness, be attributed entirely to very good luck. And unless some of the unnecessary surgery is eliminated, we will most certainly have some deaths in our next sixty-five cases.

CONCLUSIONS

1. Our percentage of correct diagnoses would be improved if we constantly bore in mind the fact that any woman in the child-bearing age who presents herself with the symptoms of pelvic or abdominal pain, accompanied by irregular menstrual bleeding, may possibly have an ectopic pregnancy.

2. We would also improve our percentage of correct diagnoses if we would invariably perform a careful pelvic or rectal examination on every woman subjected to abdominal surgery.

3. A correct diagnosis would be arrived at more frequently if we made more use of the Friedman test in the less acute cases.

4. Preëxisting pelvic infection is a very definite factor in the production of ectopic pregnancy, but it is by no means the only one.

5. If we are to keep our mortality figures low, we must very carefully avoid all unnecessary surgical procedures.

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URETERAL CALCULUS: ITS MANAGEMENT*

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IT has become an established custom for the chairman of each scientific section to deliver an annual address. Fortified by this precedential consideration, and by the fact that all rebuttal is strictly taboo under the circumstances, your Chairman ventures to set forth herein certain opinions with regard to the management of ureteral calculi. Opinions are both justifiable and quite the order of the day in this realm, since palpably no rule of thumb approach nor standardized technique will suffice for universal application. In sooth, the problem of stone management remains a highly individualistic matter from the standpoint of both patient and surgeon alike. Moreover, in solution of this problem, there appears to be no substitute for actual experience.

Any urologist practicing in the Sacramento Valley must soon acquire skill in the management of ureteral calculi because he sees so many. In fact, stone in this area constitutes an overwhelming proportion of all upper urinary tract morbidity. The exact explanation remains controversial. Older men were prone to blame climatic vagaries (the extremely hot days and the cool nights which are responsible for drastic changes in urinary concentration), or possibly the abundance of very hard water in this district. Modern brain trusters, however, with their streamlined etiologic concepts invoke dietary deficiencies, metabolic disorders, colloidal imbalances, obstructive phenomena, parathyroid tendencies, renal trauma and focal infections as more probable causative factors. Whatever the true explanation may be, calculi have always been and still are prolific in the Sacramento Valley, the present upsurge of scientific and quasi-scientific measures for prophylaxis to the contrary notwithstanding.

STONE PREVENTION

This article concerns itself but briefly with methods for stone prevention. Certainly the urine of a stone-former must be checked and double-checked repeatedly for bacteria. Positive identification of the type of organism is important with regard to both treatment and prognosis. The presence of the urea-splitting group constitutes a challenge to therapy and militates for recurrence. Certainly a careful check of the urinary tract (especially intravenous pyelography) is in order to eliminate any deviatory quotient with urinary stasis. Inquiry into dietary habits may be productive, especially as to excessive ingestion of foods rich in calcium phosphate and with regard to prolonged use of any medication. Determinations of the calcium content of the urine should be

* Chairman's Address. Read before the Urology Section of the California Medical Association, at the Seventy-first Annual Session, Del Monte, May 3-6, 1942.

made. A persistent calciuria may connote hyperthyroidism or altered bone metabolism among other factors. Chemical analysis of the stone may prove illuminating from an etiologic standpoint. Fortunately, most common stones contain calcium and phosphorous in varying amounts, and hence are shadowgraphic because of the radiodensity of these elements. A relative appraisal of the stone's composition can be obtained from the roentgenologic study alone. The intensity of the shadow, the sharpness of outline, the general appearance, the homogeneity or lack of homogeneity in density, the contour and structural arrangement are all suggestive. The "feathery" calcium oxalate deposition, the lamellated phosphatic stone and the peculiar wax-like cystine formation need no introduction to the modern Zadig. Few stones are completely radiolucent (notably uric acid crystals), and these which are usually small in size may betray their presence by increased density in the renal shadow during excretory urography before other diagnostic methods are employed.

Despite chemical erudition, newer pathologic teachings, relevant theoretical prolixity, and advanced physiologic concepts, many phases of stone prevention still remain enigmatic. Moreover, in spite of these advances, corresponding clinical accomplishments seem woefully lacking —at least to the practical soul or iconoclast. Aside from appropriate measures to relieve urinary stasis and eliminate infection, the hard-headed surgeon has had little faith in the ertswhile sallies of the theorist to dispatch the unknown culprit through alteration of the urinary pH, dietary prestidigitation or vitamin administration. Memories of Don Quixote and the windmills linger, therapeutic lances are friable and stones often reform or increase in size despite an "all-out" effort to the contrary. Innovations—newer methods for stone prevention—come and go with almost monotonous regularity, but surely at this time no Promethean unguent is as yet discernible upon the horizon. Only yesterday the vitamin concept seemed most plausible and already the rôle of A deficiency has been disparaged in the scales of clinical application. In the light of our present knowledge it seems almost fitting to relegate this subject of stone prophylaxis to the inhabitants of the Island of Lanterns—so ably described by Rabelais in his celebrated satire. Such a conclusion, however, intends no aspersion upon current research and valuable clinical studies to the end of prophylaxis.

GENERAL CONSIDERATIONS

Effective management of a ureteral calculus depends upon comprehensive study of the patient as well as of the stone. Only in this way can a strategic approach be planned. The size, shape, number and position of the stone or stones are all important. Other things being equal, a stone without spicules or facets, but regular in contour and small in size, should offer the least difficulty to passage. Many stones are obviously too large to pass, as indicated directly by the roentgenologic examination. With regard to stones of lesser magnitude, size alone does not determine the degree of motility or progress. The presence of several stones on a given side or bilateral involvement but complicates the original problem. A stone fixed elsewhere than at one of the three anatomic points of ureteral constriction (i.e., at the uretero-pelvic juncture, the pelvic brim and the entrance into the bladder), suggests thereby pathologic change or abnormal narrowing in the respective area. Stones are more often impacted in the prevesical spindle (1 to 4 cm. above the ureteral orifice) than elsewhere. The greatest barrier to transit is usually encountered at a point just where the ureter dips into the bladder, and here the stone is prone to lodge and progress ceases. The intramural segment of the ureter is the least distensible, but once the stone enters therein, transit is usually assured. Dilatation or thinning of the ureter above a stone bespeaks chronicity and agurs against expeditious passage.

All factors relative to the patient himself must be weighed and appraised in choice of the technical approach. The condition of the corresponding kidney and the status of the opposite kidney are vitally important. The presence of urinary infection, chills, fever, sepsis, hemorrhage, uremia, referred gastro-intestinal symptoms, agonizing pain without relief or evidence of progress may necessitate a shift in operative attack. Likewise a tight urethral stricture or an obstructing prostate may preclude instrumental manipulation or render the latter inadvisable because of potential untoward reactions.

TECHNICAL CONSIDERATIONS

It was Agur in the book of Proverbs who tabulated four things hard to be known, to wit: the way of an eagle in the air; the way of a serpent upon a rock; the way of a ship in the midst of the sea; and the way of a man with a maid. To this list the humble urologist might add the way of a stone in the ureter. For surely nothing is more unpredictable or whimsical than the behavior of a calculus in the ureter. At times a tiny stone impacted in the pelvic segment constitutes such a Nemesis to patient and surgeon alike as to mandate ureterolithotomy. Again, a very large stone promptly responds to the slighest manipulative effort with a "pop" into the bladder. Nor is it unusual for a tightly lodged stone of some size, after several apparently futile manipulative attempts, to deliver spontaneously an hour or so before surgery is undertaken. Hence, it cannot be considered remiss in certain instances (when the stone is small and in the absence of infection and subjective symptoms) "to trust to the whirlwind and the current," even as Pantagruel did his ship in quest of the empire of Whimdom. In fine, to play percentages and adopt a watchful waiting attitude for an indeterminate interval

pending spontaneous passage of the stone is not always an impractical procedure.

Explanation for this freakish behavior of ureteral calculi, while not quickly forthcoming, hinges at least in part upon the ureter's mechanical ability to express the stone. To this purpose it appears poorly adapted since the lumen is small, the walls thin, the musculature not overly developed and the whole structure keenly susceptible to reflexes which may be more adverse than helpful under the stimulus of the foreign body. Whosoever, while performing cystoscopy, has the misfortune to snap off a ureteral bougie or catheter, so that the broken end protrudes slightly from the ureteral orifice, will likely receive an impressive demonstration of ureteral reflex, a potentiality not soon forgotten. Twice the author has experienced this mishap and both times, much to his chagrin and vexation, the bougie quickly disappeared from sight and agilely ascended the ureter. Needless to say surgical removal was necessary. Just why these reflexes must be so contrary under the circumstances remains something of a mystery, and one willingly left to the physiologist for explanation.

Aside from those stones which pass spontaneously, perhaps 65 to 75 per cent of the remainder can be assisted by instrumental manipulation. Surgery should be used at the outset in other instances, and when manipulative efforts fail or complications arise in their wake.

MANIPULATIVE CONSIDERATIONS

With the advent of the operating cystoscope came the début of many original and ingenious devices for removal or manipulation of ureteral calculi. Inventive possibilities of this sort seemed almost limitless. Enthusiasm waxed high at the outset. Mechanical wizards were fascinated, tinkers overwhelmed and the crystal-gazing and wishful-thinking contingent of our profession enthralled. Strange were the developments, grotesque in form, often bungling in application, and many by nature positively dangerous. Some of the safer and better-known devices have withstood the test of time and are still used by certain urologists. Forceps, with serrated jaws mounted on a semiflexible shaft, to grasp the calculus blindly but so constructed as to exclude the mucosa (like the Bransford Lewis instrument), are employed by some for removal of small stones. Basket arrangements to enmesh the calculus, such as the Johnson or Councill extractors, have become very popular. The Howard spiral or corkscrew dislodger, so built as to engage the stone in rotary maneuver, appeals strongly to many urologists.

It is a clinical observation, in fact almost axiomatic, that the nearer the stone approaches the bladder the more susceptible it becomes to manipulation. Moreover, about 75 per cent of all ureteral calculi reach the prevesical spindle. At times a tight ureteral orifice must be enlarged to admit of instrumentation, and to facilitate passage of the stone. This should always be done with the scissors or cold knife through the operating cystoscope. The swelling and reaction engendered by fulguration may add insult to injury, so that as a postlude complete blockage of the side intervenes and catheterization becomes impossible.

It has been aptly said that "An obstinate man does not hold opinions; they hold him." Without wishing to appear obstinate or magisterial, the author desires to protest against all unnecessary intra-ureteral manipulations. None is without danger. Twenty years of experience has made him somewhat gun-shy and ultraconservative in this respect. Even the slight trauma incident to ureteral catheterization may invite infection in the presence of urinary stasis, with renal involvement and septicemia in the offing, not to mention the ever-present danger of perforation of a weakened ureteral wall.

Although the ureter is a fragile structure, Wesson has illustrated with autopsy material that the normal ureter cannot be punctured by the ordinary catheter regardless of the amount of force exerted. On the other hand, a ureteral wall, weakened by the presence of a stone through maceration, inflammatory reaction or pressure necrosis, is a ready object for perforation, and hence the least traumatizing instrument and the most delicate manipulation are required to avoid such an eventuality. In three proven instances (operative exposure), the author has unfortunately poked a stiff catheter through the ureteral wall when it had been weakened by the presence of a calculus. No filiforms or whalebone tips were used in these cases, and no undue force was applied. Such an accident quite easily occurs in the abnormal ureter in spite of the utmost gentleness, all protestations to the contrary notwithstanding, and especially with the new stiff American catheter. Moreover, this liability is directly increased by any therapy to obviate pain or to produce extreme ureteral relaxation such as spinal anesthesia. The author uses the basket type of extractor infrequently and eschews entirely the metal forceps, all metal-tipped appliances and the spiral device—despite the fact that thousands of the latter have been manufactured and sold.

Difference of opinion, however, makes a horse race, and if one must use stone extractors the rule set forth by Bumpus seems excellent, to wit: that no type of extractor should be used which cannot be easily removed after it has engaged the stone. Spiral dislodgers may be reversed. Occasionally the basket type of instrument must be unscrewed and left in situ for 24 to 48 hours, before removal is possible with the stone entrapped. The loop method, as endorsed by Finney, is useful in some hands. The distensible bag has advocates. Physiologic dilatation of the ureter, by simple plugging of the latter temporarily with a sizeable bougie or catheter, is espoused by others. Each urologist has his own pet method for attack, and many of them are highly unique and individualized. Apodictically, greater manipula-

tive leeway is permissible in the prevesical segment than elsewhere. Preference should be based upon simplicity, the incorporated features for safety and the degree of efficiency forthwith.

The author has no talismanic incantation, no magic formula, no cryptic shift, no sleight of hand stratagem nor infallible method to offer for dislodging or facilitating the passage of a calculus. For general use, an indwelling catheter seems most expedient and efficacious. If the calculus is small (and fortunately most of them are), usually a soft ureteral catheter can be adroitly slipped beyond the stone without difficulty. This is fixed in place for 24 to 48 hours and the usual aseptic precautions taken. If the stone is relatively large, 5 c.c. of deproteinated pancreatic extract (Depropanex — Sharp and Dohme) are administered just prior to instrumentation, to facilitate ureteral relaxation. This extract is very potent, so much so that in many instances the stone has been observed roentgenologically to shift its position or even ascend before instrumentation is undertaken. The use of an indwelling catheter drains the kidney (therefore relieves the pain and colic), softens the parts generally and seems to prepare the whole tract for subsequent passage of the stone. Moreover, the catheter's impact often shifts the long axis of the stone into better alignment so as to capitalize advantageously upon the peristaltic efforts of the ureter. At the time the catheter is withdrawn, 3 to 5 c.c. of sterile olive oil are injected. Unless counterindications exist, prostigmin methylsulfate (1:2000 solution in ampules—Hoffman La Roche) is then administered, 1 c.c. hypodermically, every two hours for six doses as a vagotonic agent. The patient is allowed to be up and about during this course of therapy. A rest period is then given the patient, conditioned upon his symptoms, both subjective and objective, and upon the stone's behavior, and if necessary this whole régime is repeated. In other instances the multiple catheter method has served well, but your speaker has not been fortunate in ensnaring the stone by this means. Success often crowns such simple methods, and the stone passes spontaneously within a few days—particularly if the patient can be physically active in the interim. The basket contrivance is kept in reserve for the more difficult case, or one in which progress is not readily manifest.

SURGICAL CONSIDERATIONS

Anent stone management, if ever justifiable criticism is due the profession it is because the surgeon sometimes delays operation too long, hoping for results by the so-called conservative method. In certain instances the latter may become much more formidable or radical than the open attack. Awkward or bungling efforts at manipulation may cause incalculable harm. As an aftermath come chills, fever, pain in the loin, pyonephrosis, an acute surgical kidney or septicemia. Death is cheated only by prompt surgical relief. It must be confessed, however, that the sulfa group of drugs has presently mitigated somewhat the terrors of infection, although their known secondary effects make cautious administration the watchword.

Nice surgical judgment pays handsome dividends in the management of ureteral calculi. Special circumstances often necessitate surgery. Conspicuous therein are the size of the stone (in general, larger than 1 cm. in the upper ureter or 2 cm. in the lower portion), the condition of the corresponding kidney (infection, complete blockage, pyonephrosis, etc.), or that of the opposite kidney (hydronephrosis or congenital anomalies), the presence of several stones (unilateral) or bilateral stones, sepsis and impending uremia, to mention only a few. A sizeable stone above which the ureter is dilated, and which shows no evidence of motility after several manipulative attempts, should be subjected to ureterolithotomy without further ado—especially if the kidney demonstrates any degree of infection or damage.

Aside from other considerations, ultimate choice of technical attack depends somewhat upon the operator's make-up and persuasion. If he is convinced that perseverance and audacity generally triumph, manipulative repetition is almost inevitable. On the other hand, after reasonable effort to facilitate transit of the stone, most men who are surgically-minded prefer, like John Deaver, "to walk by sight rather than by faith," if no progress is forthcoming. The author belongs to this school of thought. He instinctively hates to wrestle in the dark with an unknown adversary, for like Jacob of old he may prevail not. Somehow it seems a bit rash to grapple blindly for the stone with serrated jaws of steel in such narrow confines, despite elaborate safeguards to exclude the mucosa. Should success reward such daring, and perchance the stone be cleanly captured, it would tax even Houdini's skill to pull forth a small calculus in this manner without stripping or traumatizing the ureteral mucosa irreparably. A large stone cannot be extracted in this way and the ureter may be divulsed in the attempt. Again it seems both imprudent and hazardous to rotate a spiral bludgeon of steel, a veritable "go-devil," up such a thin and defenseless little tube. Nor does it appear much less perilous to open a bear-trap (even though flexible) in the same fragile tube for purposes of ensnaring the calculus. Finally, it requires a world of fortitude and optimism in the face of discouragement, and in absence of progress, to continue feeble titillation of the stone with a pliable ramrod. Hence the sophisticate is prone to thrum the surgical string to his bow.

Ureterolithotomy becomes, therfeore, something of an "Open Sesame" for the patient and surgeon alike in many instances, and is always a sheet anchor. Moreover, the operation is quickly and easily done. The mortality is very low save in the superannuated (especially because of em-

bolic possibilities in pelvic surgery), and the convalescence is usually rapid and uneventful. Conversely, it must be admitted that no surgery is devoid of danger, and that occasionally disagreeable sequelae arise (particularly in the prevesical segment) such as urinary fistula, postoperative stricture or even complete ureteral occlusion.

It should be a urologic maxim, always to recheck the position of a stone just before the patient is taken to surgery, or after he has been placed on the table. Pursuant to the freakish behavior pattern, any stone may shift about or alter its position abruptly and entirely without the production of symptoms, be the interval since the last roentgenogram ever so brief. To be thus forewarned leaves nothing to chance. In the event of bilateral calculi, it seems the part of discretion to operate one side at a time, save in rare and unusual instances. As a general rule, the less involved side is subjected to the initial attack. Surgically considered, the territory in and about the uretero-pelvic juncture and the prevesical spindle are of particular interest since stones rarely become lodged or impacted in the middle third of the ureter.

For stones lodged in and about the ureteropelvic juncture the author prefers a modified Mayo incision, similar to that used for kidney exposure, but possibly placed a little lower than the latter. Efficient work depends upon good exposure. Great care is taken in handling the ureter; a clean-cut incision is made into the ureteral lumen in the long axis of the tube, and the stone removed with specially designed forceps. This incision is commonly begun over the stone and carried upward. Rough handling or tearing of the ureter in the process of removing the stone is to be avoided. No sutures are used in the ureteral wall, unless the tube is greatly dilated or the incision therein overly long. The advantage of ureteral sutures is still a moot question. Drains, of course, are necessary.

Stones impacted in the prevesical spindle give the surgeon the most concern. The great depth at which they lie in the pelvis, and the tendency to persistent venous oozing make good exposure difficult. Moreover, in the male the anatomic juxtaposition of the seminal vesicle but worsens the situation. The author prefers to pass a ureteral catheter beyond the stone at the outset, if possible. This catheter acts as a guide, prevents rolling of the ureter and tends to immobilize the stone while the incision into the ureteral wall is being made. A midline or suprapubic approach is easiest and gives the best exposure, and may be prolonged upward if the stone is lodged higher. The empty bladder is crowded to the opposite side of the pelvis and the stone located. Directly an Allis clamp is applied loosely to encompass the ureter and periureteric tissues en masse above the stone, in order to prevent the latter from slipping upward in the dilated tube. Blunt dissection and painstaking effort are required to gain depth. Time spent to care for venous oozing is profitable. The stone is delivered with forceps through a clean-cut incision. Undue traction and awkward efforts in delivery are interdicted. Patency of the ureter above and below the incision is established. No ureteral sutures are needed for coaptation. Drains are always necessary.

Sequelae comprise prolonged urinary drainage which is often indicative of an obstruction between the bladder and ureteral incision, such as a stone spicule. Postoperative strictures are not uncommon, and must be cared for by ureteral dilatations. Good drainage insures against infection. Postoperative occlusion of the ureter is not rare, and sometimes passes unnoticed because of the absence of symptoms. In a series of 42 ureterolithotomies (prevesical spindle) the author has had this misfortune occur 5 times. Nephrectomy was necessary in 2 instances. Another fairly common sequela, not mentioned in textbooks, is the postoperative development of epididymitis on the affected side. Moreover, the latter is apt to be very troublesome and recurrent in the author's experience.

A comprehensive subject, like the management of ureteral calculus, is necessarily an arbitrary one, and its very mention causes many avenues for discussion and different interpretation to unfold. Three interpretations or ideologies are quickly apparent, to wit: your own opinion, the other fellow's and the correct one. While these erstwhile opinions are certainly tendered in no spirit of *magister dixit*, nor yet in a vainglorious style, the author feels inclined to make no apologies for them. These opinions, which emanate from the Sacramento quarry, represent: sincere convictions based upon twenty odd years of clinical experience; much thought and study, trial and error calibration at the bedside; tachycardia induced by the spiral or "go-devil" dislodger; labor with ingenious bear-traps for stone removal; sweat at the operating table; travail in pitfalls; tears and curses for bungling mishaps; gratitude for Nature's benevolent help; faith, hope, and charity for the newest panacea in the matter of prevention; and a ceaseless struggle for enlightenment and truth with regard to the management of ureteral stones. Nevertheless, it must be admitted that these opinions are only the author's and may neither concur with the other fellow's nor be the correct ones.

EPITOME

1. Calculus is common in the Sacramento Valley, ureteral stone causing the majority of upper urinary tract involvement in this geographical area.

2. Study of the stone is a prerequisite to proper management: i.e., size, shape, number, anatomic emplacement and motility. Study of the patient is also obligatory: i.e., general, local and associated conditions.

3. Watchful waiting is not always amiss, since spontaneous expulsion is not infrequent. Error in

judgment, or leaning too far toward conservatism, however, may result in greatly increased morbidity and perhaps otherwise avoidable mortality.

4. Author's expectant treatment consists of insertion of a soft indwelling ureteral catheter left in situ for 24 to 48 hours, under aseptic conditions. Sterile olive oil is injected upon withdrawal of the catheter, and prostigmin methylsulfate is given hypodermically with the patient ambulant. For large stones, deproteinated pancreatic extract administered just before instrumentation aids in securing ureteral relaxation. Metal forceps and metal-tipped stone dislodgers have no place in instrumentation within a ureter weakened by stone, as demonstrated by three known personal cases wherein perforation occurred.

5. Failure to respond to a reasonable trial of manipulative measures should be followed by immediate open operation. Unnecessary intraureteral manipulations should definitely be excluded on a physiologic basis.

6. About 75 per cent of ureteral stones reach the prevesical spindle. If ureteral meatotomy is necessary, scissors or cold knife are preferable to fulguration, for the occlusive effects of the latter may defeat its purpose.

7. Warning is sounded to recheck position of stone immediately before surgery.

8. Author's technique of ureterolithotomy is given, stressing the importance of adequate drainage.

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CHRONIC BRUCELLOSIS: DIAGNOSTIC POINTS NOTED IN ONE HUNDRED CASES

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A NEW doctor's dilemma appeared when Harris[1] published his monograph, "Brucellosis," in April, 1941. The acceptance of this work has met with considerable resistance on the part of some experts in the field of infectious diseases, because it makes chronic brucellosis appear to be a far more common disease than was ever supposed, and it throws a tremor into practically all our previous standards of laboratory diagnosis of active brucella infection.

Dr. Harris maintains that chronic brucellosis can and does simulate practically every other disease in its varied symptomatology. He shows that fever is not always present,* and that the agglutination test is usually negative in chronic cases of active infection. To culture the brucella organisms from the blood or other body fluids of a chronically-infected case is very difficult, expensive, and usually unsuccessful; yet the disease has been proved by positive cultures when all other laboratory and skin tests were negative. The opsonocytophagic power of the patient's blood may be low, moderate, or high. The leucocyte count may be low, normal, or high. There may or may not be anemia. The color index may be high, normal, or low. The differential count may be normal, or show lymphocytosis or granulocytosis. The intradermal test is most likely to be positive, but it may be negative or questionable. If positive it means only that the body has acquired a sensitivity to the Brucella proteins, presumably from past contact with the germs. Like the tuberculin test it does not in itself distinguish between an active infection and a healed, past infection. Furthermore, a positive skin test, if given before the blood tests are made, may alter the latter and thus make subsequent blood tests indeterminant because of possible false positive reactions. The same criticism might be made of the therapeutic test with vaccine, which cannot, anyway, be interpreted accurately in a short time. Unlike syphilis, which also can mimic any disease, brucellosis has no test comparable to the Wassermann reaction in reliability and applicability.

Thus we are confronted with the concept of a specific infectious disease whose symptoms and immunologic features are more protean and inconstant than have ever been known before. Such a concept should naturally be resisted by well-schooled and conservative minds.

The present study is concerned with an analysis of the diagnostic data in 100 cases of chronic brucellosis. These cases have been seen and studied in the course of a general private practice. Whether they are true cases of chronic brucellosis, is, in the present state of diagnostic criteria, subject to individual interpretation. They are accepted as true diagnosis by the author because of certain combinations of findings in each case, and because of the clinical course both before and after specific vaccine therapy. Twenty-five additional cases of probable brucellosis were omitted from this study because of incomplete or inconclusive data, or the presence of other concurrent disease.

THE FACT OF ILLNESS

Regardless of test results, the diagnosis is not made unless the patient is suffering from real illness. All of these patients were sick enough to seek medical care voluntarily on a private-fee basis, because of disability and/or discomfort of a persistent or recurrent nature. Routine laboratory tests done on healthy cattle-handlers and slaughter-house workers will show some positive results, but such healthy persons do not have the disease within the meaning of this study.

DURATION OF ILLNESS

When the chronic disease has an insidious onset, the duration is difficult to ascertain with certainty. The diagnosis was not made unless the

* The term brucellosis is preferred to "undulant fever," "Malta fever," etc., for this reason, among others.

symptoms had persisted at least 3 to 6 months. Only 11 cases had a duration of one year or less. The largest number had been seeking relief for 5 to 10 years. The distribution is as follows:

3 mos. to 1 year	11 cases
1 year to 3 years	24 cases
3 years to 5 years	18 cases*
5 years to 10 years	28 cases**
10 years to 20 years	11 cases***
20 years to 30 years	5 cases
10 years to 50 years	1 case
36 years	1 case
57 years	1 case
Total	100 cases

* Includes "Few years" and "1 to 6 or 8 years."
** Includes "Years."
*** Includes "Many years."

The cases of longest duration are often the most difficult to "cure," but the patients are most appreciative of the results of vaccine therapy. The therapeutic results in the seven longest cases have been rated as 1 "excellent," 2 "very good," 3 "good," and 1 "fair."

TYPE OF COURSE

The undulant course is conceived as that in which there is always a condition of ailing, or lack of vigorous health, with constant "ups and downs," so that the patient never feels perfectly well, is frequently miserable, and occasionally obviously ill, clinically. The remittent course is that in which complete remissions of apparently normal health are interspersed between recurrent periods of quite consistent symptomatology. Both types of course are typical of chronic brucellosis and there are gradations between them. Two cases are classified as "constant" because, for more than 10 years before treatment, both patients were always too uncomfortable to appreciate relativity to any great extent.

In this series the course of the disease before diagnosis was as follows:

Undulant Course	76 cases
Remittent Course	22 cases
Constant Course	2 cases
Total	100 cases

HISTORY

A long and searching history is the first step in diagnosis. It includes a careful tabulation of symptoms, as well as past illnesses and diagnoses. The duration and reappearance of each symptom are considered important. A history can be considered characteristic if it presents a long period of mild ill-health, with frequent more intense attacks in which the diagnoses are varied, atypical, or frankly puzzling. A history of persistent or recurrent low-grade fever is most significant. "Flu" every year, or several times a year, is a frequent story. Many times a diagnosis of neurosis or constitutional frailty has been made. Another suggestive point is the failure to improve or recover in spite of good treatment for the supposed diagnosis. Instability of visual acuity and stubborn "allergies" are not uncommon clues.

The symptoms presented by these cases will be analyzed more fully in another report. The most common complaints can be listed as follows:

1. Ease of fatigue, lack of energy, weakness, or lethargy, appearing both chronically and in attacks. This symptom, in one form or another, is prominent in practically every case of chronic brucellosis. The diagnosis should be looked upon with suspicion if this symptom is not easily elicited. This is not true of any other symptom.
2. Aching or pain in the muscles, nerves, joints, or bones.
3. Headaches, and often light-headedness, in attacks.
4. Catarrh, postnasal drip, "sinusitis" or "allergy."
5. Digestive system disorders, usually with excess gas, and called by many diagnostic terms.
6. Fever. Many patients are unaware of one degree of fever: others feel it at 99°.
7. Less common symptoms are tachycardia, palpitation, excess perspiration, epistaxis, and a host of others.

The patient usually does not know where to begin giving his history. He has two or three or more chief complaints, and if he starts to name off all his symptoms he sounds like a neurotic for the following reasons:

1. His symptoms are varied.
2. They are apparently unrelated.
3. They are often inconsistent individually.
4. They are minor symptoms for the most part, in that they are usually not quite typical of any major pathology.
5. They are of long duration, but they disappear now and again for no apparent good reason.
6. They do not respond to symptomatic treatment very well, nor to psychotherapy; or, if they do, the cure is not permanent.
7. The patient has been "doctoring" for a long time, has had many plausible diagnoses and treatments, has usually been told that he is neurotic, and by this time he often is, to some extent.

SOURCE

The use of raw milk, at least occasionally, is so widespread that a history of it may mean little or nothing in the diagnosis. On the other hand, in California it may mean a great deal, because there is no State law providing for control of Brucella infection in cattle (Bang's Disease or Contagious Abortion). Only in the certified herds is there any regulation that might warrant confidence. A history of customary consumption of raw milk daily or occasionally is considered worth asking about in diagnostic studies. The absence of it, except in cattle-handlers or laboratory technicians, throws doubt on the diagnosis, but it cannot alone rule it out. In several cases in our series this point of history was not asked for. We know of no positive case in which the patient has absolutely rigidly avoided raw milk in every form. The analysis follows:

Definite history of raw milk consumption	71 cases
Cattle handler, usually drinks pasteurized milk	1 case
Cattle handler, drinks raw milk	1 case
History of raw milk not elicited	27 cases
Total	100 cases

FEVER

Fever, if present or recurrent in the history, is an important diagnostic indication, because it is an objective sign as well as a symptom. A single short bout of fever, even if unexplained, cannot be considered suggestive of chronic brucellosis. It is now well known that chronic brucellosis can be present, even actively, without fever. The determination of the fever record is done with a thermometer certified to require no correction at any point on the scale. It is left under the tongue for fully five minutes at various times of day, until the time of maximum temperature is discovered. The temperature at this time of day is recorded for a week or more. Slight allowances are made for excessively hot weather, and the menstrual onset in women. Longer records eliminate these factors of possible error.

The occurrence of fever before treatment in this series was as follows:

Fever present in	74 cases
Fever absent in	23 cases
Fever not determined in	3 cases
Total	100 cases

* * *

Usual maximum near-daily fever of 99° or less in	13 cases
Usual maximum near-daily fever of 99° to 100° inclusive in	39 cases
Usual maximum near-daily fever of above 100° in	6 cases
Unspecified or "occasional" or "frequent" in	16 cases
Total	74 cases

In scarcely any case was the fever the most important deciding factor in the diagnosis. It is chiefly an evidence of the organic nature of the patient's condition, and an indication of some infection. In conjunction with the history and the blood count it may form an important link in the chain of data. In this series every case which had a normal temperature was amply buttressed with a combination of other competent diagnostic findings.

PHYSICAL EXAMINATION

No physical findings are considered indicative of chronic brucellosis. In fact, an important diagnostic point is the absence of physical findings capable of explaining the symptoms. Fever is the most important discovery, and it is surprising how often it is omitted from office examinations. In hospitals the temperature is often taken too hastily to be reliable. An enlarged liver or spleen should make one think of the possibility of brucellosis. In this series the liver was enlarged in two cases, the spleen in another, and two presented a possible enlargement of the spleen by percussion. The most frequent finding in this series was a peculiar pallor which has been described by others. It was noted in 35 cases. When it is present the facial skin has the appearance of very old, faded, limp leather. The muscles in the skin are relaxed and atonic. The face looks tired and simply colorless. There may be redness about the nostrils and base of the nose. The next most common finding was redness of the mucous membranes, especially of the nose. The anterior end of the septum often presents small white crustings, as if sprinkled with a few grains of salt on a reddened background. Increased redness of mucous membranes was noted in 20 cases. It was interesting that most of the patients in this series complaining of "allergy" failed to show pale mucous membranes and eosinophilia in the blood. Five cases presented by x-ray and/or physical examination destructive Brucella bone lesions.

BLOOD PICTURE

Calder, Steen and Baker[2] described the blood structure in nearly 300 cases of brucellosis, and pointed out that, while it is not diagnostic in itself and not always present, there is a typical combination of blood count data not duplicated as uniformly in any other clinical entity. Their typical picture included the following: (a) relative lymphocytosis, often absolute and active; (b) leucopenia in 1/4 of the cases, a normal leucocyte count in 1/2, and a leucocytosis in 1/6 of the cases; and (c) a mild macrocytic hyperchromic anemia. They also found a moderate eosinophilia in 1/5 of the cases, a normal monocyte count, and a few other minor points not checked in the present analysis.

In the present series the initial blood studies were done before the patient was given any skin test or vaccine. The lymphocyte count was:

Not done in	3 cases	
Below 30% in	15 cases	
30 to 34% incl. in	23 cases	
35 to 40% incl. in	19 cases	
41 to 50% incl. in	26 cases	
51 to 60% incl. in	12 cases	60%
62% in	1 case	
82% in	1 case	
Total	100 cases	

The total leucocyte count was:

Below 6,000 in	43 cases	(44.8%)
6,000 to 10,000 in	46 cases	(48.0%)
Above 10,000 in	7 cases	(7.2%)
Not done in	4 cases	
Total	100 cases	

The hemoglobin was below 14 Gm. in 63 cases (67%).

The hemoglobin was below 12 Gm. in 12 cases, the lowest being 9.5 Gm. in a case with a positive blood culture.

The color index was derived by the method of Isaacs[3] in which $\frac{\text{Hbg in Gms.} \times 3}{\text{RBC in millions (1st two figures)}}$ equals the index. This gives a slightly lower figure than some other methods in use, but it seems to be more accurate than those based on per cent of normal hemoglobin. The color index was:

Below 0.9 in..... 11 cases
1.0 or above in..... 41 cases (44%)
0.9 to 1.2 in..... 81 cases (87%)

The monocyte count varied from 0 to 9 per cent, the average being about 3 per cent.

The eosinophile count was usually normal. The maximum was about 4 per cent, and it occurred in only 4 cases out of 97 counts.

The blood sedimentation rate was very variable. It is not a particularly helpful test, except that its frequently normal rate in brucellosis helps to differentiate it sometimes from active tuberculosis, rheumatic fever, and other conditions which usually show a rapid sedimentation rate. It was:

Normal or prolonged in 28 cases (two-thirds of those tested).

Rapid in 10 cases.

Slightly accelerated in 2 cases.

The blood picture was helpful in diagnosis, by virtue of the work of Calder, and others, in 47 cases in this series of 100. It is not often a decisive factor of much moment in itself. It can be interpreted accurately only in the light of other evidence. Leucopenia, for example, should be judged partially in relation to fever.

URINE EXAMINATION

This has usually been done so many times in so many places with negative results for most of these patients, that it is usually omitted unless the history indicates it. A small amount of albumen or a small amount of pus has not uncommonly been a misleading finding in the diagnosis of a patient with chronic brucellosis. When due to brucellosis these small urinary findings usually clear up in a short time spontaneously. Meanwhile the symptoms referable to the urinary system may be all out of proportion to the findings.

BLOOD CULTURE

The blood culture[4] for Brucella was negative in 5 cases and positive in 1 case. In the case with the positive blood culture all other laboratory and skin tests were negative, weak or questionable. Cultures have been seldom done in chronic cases unless the fever is above 101° or there is a focus of infection. Culturing for brucella is a difficult, expensive and usually disappointing procedure, especially in private practice.

AGGLUTINATION TEST

It is now well known that the agglutination test is more often negative than positive in the chronic form of brucella infection.[1, 7, 5, 6] The blood was always taken for the initial agglutination test before the patient was given vaccine or any skin tests. The initial agglutination tests for diagnosis resulted as follows:

Negative in 86 cases (89 per cent). One of these was reported positive by another laboratory, but the specimen was partly hemolyzed.

Positive in 10 cases, two of which were questionable because of partial hemolysis of the specimen, and a third one was also reported negative by another laboratory.

Positive in a titer of 1:80 or higher in only 4 cases, two of which were questionable because of partial hemolysis.

Positive in a titer of 1:40 in 3 cases, one of which was also reported negative by another laboratory.

Positive in a titer of 1:20 in 1 case.

Positive in unspecified titer in 2 cases.

Not done in 4 cases.

The agglutination test was the least useful of all tests, except in the 7 cases in which it was unquestionably positive.

After treatment with vaccine was begun, the negative agglutination test became positive in at least 29 cases, 5 of them in titers of 1:320 or higher, and 17 in titers of 1:80 or higher. The positive agglutination test became negative after beginning treatment in three cases, in all of which the patients were hypersensitive to Brucella proteins to the point of skin necrosis. Treatment has not yet changed the agglutination test in 31 cases, whether positive or negative. Retesting has not been done in 33 cases.

COMPLEMENT FIXATION TEST

In the present series this test has been too little used to permit an appraisal of its value.

OPSONOCYTOPHAGIC INDEX

The blood is always taken for this test before any vaccine or skin test is given. The power of the polymorphonuclear leucocytes to phagocytose living Brucella bacteria from a fresh culture is tested by Falk's modification[1] of Huddleson's method[8] using carefully citrated blood less than 6 hours old. The stain used is usually a modified Wright's rather than Hastings'. The slides are read by the method of Huddleson, and recorded also in terms of the phagocytic index number of Foshay and LeBlanc.[9] The latter is used in this report because it expresses the phagocytic power simply in per cent of the total maximum potential capacity of blood for brucella phagocytosis. Some consider the test "negative" when the phagocytic index number is below 10, others 20. The report from the laboratory should also show the distribution of the cells as they vary in phagocytic power. If some leucocytes ingest as many as 21 to 40 bacteria, and no cells fail to ingest bacteria, the test approaches diagnostic capacity. The significance of the test can be judged only in conjunction with other findings. The distribution of our cases as to phagocytic power is as follows: (See also Fig. 1.)

The average index number was about 20. Of the 11 cases not tested at first, 9 had phagocytic

index numbers of 78 to 97, after beginning vaccine treatment. Of 64 patients who have been given the opsonic test after beginning vaccine treatment 46 (or 72 per cent) have phagocytic index numbers of 61 to 99. Exactly half of these had index numbers of less than 20 before receiving vaccine. In 4 cases with initial high phagocytic power (No.'s 45, 65, 70, and 90) the first effect of vaccine was to lower the phagocytic numbers (to No.'s 23, 19, 58, and 20).

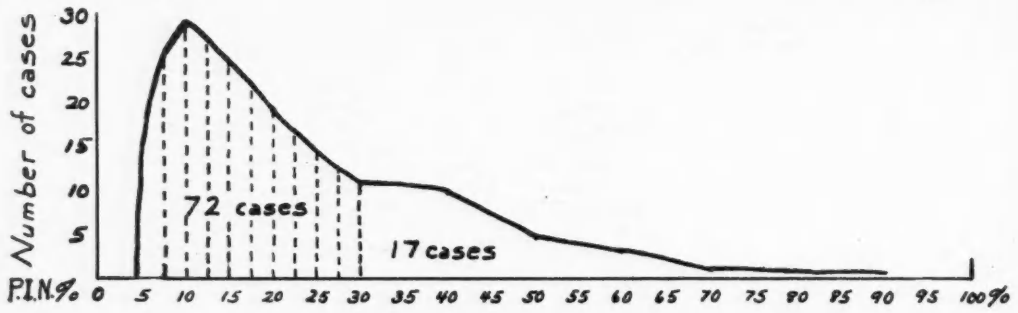

Fig. 1.—Phagocytic Index Number (Foshay) Before Treatment and Before Skin Test.

Phagocytic Index No. 10 or lower in	42 cases
Phagocytic Index No. 11 to 30 inclusive in	30 cases
Phagocytic Index No. 31 to 50 inclusive in	14 cases
Phagocytic Index No. 51 to 90 inclusive in	3 cases
Not tested before skin test in	11 cases
Total	100 cases

The initial opsonophagocytic test was helpful in the diagnosis of 31 cases, and its rapid rise to a high level after beginning vaccine therapy was considered of some diagnostic significance in 32 additional cases. It cannot make the diagnosis by itself, but properly interpreted in the light of all other evidence, it may add weight. It will not serve by itself to rule out the disease. Like the agglutination test, it is not a test of infection, but an index of one kind of resistance. It is subject to much error from human factor, time factors and the variation in methods. The test can be made valuable in diagnosis when these three factors are properly standardized.

INTRADERMAL TEST

This most useful test is very easily abused. In the first place, it should not be given until blood tests and fever record are completed. Second, vaccine should not be used for the initial skin test. Third, Brucellergen 1:12,000 (Huddleson) is milder than vaccine and may be used, but it should be diluted with 9 parts of sterile physiological saline for the initial test. This gives a dilution of 1:120,000. Fourth, a control test using the diluent saline should be given at the same time. Fifth, the tests should be read by the doctor or his trained assistant at both 24 and 48 hours. If the test is completely negative another skin test may be given after 48 hours, using Brucellergen 1:12,000 or 1:48,000, if the first test was questionable. Only if the Brucellergen tests are completely negative and the disease strongly suspected for other reasons should the vaccine be used intradermally; then diluted 1:4 or 1:100. If other tests *prove* the existence of the disease in active form, the skin test should be omitted.

The reason for this caution is that necroses and near-necroses of the skin are easily caused by strong concentrations of Brucella protein in sensitized persons with the disease (about 21 per cent in our series). Of course these lesions will heal, but they increase the patient's sensitivity to the point of making vaccine therapy extremely difficult, if not impossible. Furthermore, the patient's symptoms are aggravated by his increased sensitivity. This can be avoided by using sufficiently weak dilutions until the patient's tolerance is clearly adequate. The significance of the skin test is the same as that of the tuberculin test. Other data are necessary to determine whether there is an active infection at the time of testing. A negative skin test does not rule out the disease in the face of other strong evidence, but it makes the diagnosis very unlikely. We believe that if various strengths of protein are used every infected case will react locally or generally to some dilution. Positive tests are usually, but not always, indurated, and raised above the level of the skin surface. They are best compared with the control. A test may be positive if it is flat, but persists for many days or weeks; or, if it presents a petechial ecchymosis in the tested area not due to striking a skin vessel with the needle.

Our results with the intradermal tests were as follows:

Positive in	97 cases
Negative or questionable in	2 cases
Not done (unnecessary) in	1 case
Total	100 cases

The positive tests are further analyzed as follows:

Four plus with necrosis of the skin:

From Brucellergen 1:120,000 dilution in	0 cases
Brucellergen 1:48,000 in	1 case
Brucellergen 1:12,000 in	7 cases
Vaccine in	3 cases
Total Necroses	11 cases

Necroses occurred in 10 per cent of cases tested with vaccine.

Prolonged 4 plus with near-necrosis (premature dry desquamation of epidermis):

From Brucellergen 1:120,000 dilution in..... 3 cases
From Brucellergen 1:48,000 dilution in..... 2 cases
From Brucellergen 1:12,000 dilution in..... 4 cases

Total Near-Necroses ..... 9 cases

Total necroses and near-necroses—20 cases.

* * *

Cases tested with Brucellergen 1:120,000 dilution
Positive in.....19 cases (83%)
Questionable or Negative in..... 4 cases (17%)

Cases tested with Brucellergen 1:48,000 dilution
Positive in.....23 cases (92%)
Questionable or Negative in..... 2 cases (8%)

Cases tested with Brucellergen 1:12,000 dilution
Positive in.....43 cases (77%)
Questionable or Negative in....13 cases (23%)

Positive to Brucellergen in some dilution in 80 cases (84.3%).

Questionable or Negative to Brucellergen in any and all dilutions in 15 cases (15.7%).
Brucellergen test was not done in 5 cases.

Positive to commercial vaccine intradermally in 26 cases (93%).
Vaccine skin test was not done in 70 cases.

Positive to vaccine and Negative or Questionable to Brucellergen in 14 cases.

Positive to *undiluted* vaccine and Negative or Questionable to all others in 5 cases.

Negative or Questionable to *undiluted* vaccine and to all others in 2 cases (2%).

Properly used and interpreted in the light of all other data, the battery of skin tests is the most valuable of the objective tests in the diagnosis of chronic brucellosis. Abuse is the only thing that should discredit it. In our series the skin tests were negative or questionable in only 2 cases: one, a subacute case proved by blood culture; the other, a woman who had had the disease, undiagnosed, for 36 years. She had a chronic undulant dermatitis. Her response to vaccine therapy was "good, far better than any other treatment had ever been." Her diagnosis was based on history, palpable liver, enlarged spleen to percussion, the exclusion of other diseases, and her response to Brucella vaccine therapy alone.

EXCLUSION OF OTHER DISEASES

This is a most important step in the diagnosis. Brucellosis is very easily confused with many diseases which are potentially dangerous and should never be overlooked, while chronic brucellosis is a relatively benign condition. In our series most of the patients had been studied for a long time by a number of competent physicians and reputable diagnostic clinics. Most of the exclusion of other diseases had already been done. However, Wassermann tests, tuberculin tests and/or x-ray studies are practically routinely done. Sinusitis, eyestrain, migraine, amebiasis, allergy, cholecystitis, peptic ulcer, arthritis, hypo- and hyperthyroidism, hypoglycemia and neurosis must frequently be eliminated or assigned their proper places in the patient's total condition. The present study omits any patient who has a coincident disease which might be capable of explaining the total morbidity in the case. Systematic exclusion of other probable diseases was considered necessary and played an important part in the diagnoses of 59 cases in the present series. Most of the others had medical histories which either excluded other probable diseases or included unsuccessful treatment for them.

RESPONSE TO VACCINE THERAPY

The "final proof" would be easier to judge if vaccine therapy were easy. It is difficult. However, the patient's response and reaction to specific therapy, even though short of complete cure, is not difficult to see. With the exception of 9 relatively new cases and 7 whose improvement is rated as "Fair," all the patients in this series have either responded to vaccine with impressive improvement, or have reacted with severe hypersensitivity leaving no doubt of their diagnosis. The purpose of this study is to present the diagnostic features of 100 unquestioned cases of chronic brucellosis; therefore cases which have failed a therapeutic test are omitted.

The response and reaction to vaccine therapy includes the effect of the intradermal test whenever this effect is very pronounced locally or generally. The figures are as follows:

Improved ..... 83 cases
Unimproved (all hypersensitive) ..... 8 cases
New cases, relatively untreated..... 9 cases

Total .....100 cases

* * *

Hypersensitive cases improved..... 16 cases
Hypersensitive cases unimproved..... 8 cases

Total hypersensitive..... 24 cases

Improvement in hypersensitive cases is usually, though not always, the result of desensitization with ultra-minute doses of oxidized Brucella abortus and suis vaccine.[10] Most of the unimproved cases are being prepared for desensitization.

In the further analysis of the improved cases, unsatisfactory terms must be used for lack of others.

"Poor" means that the treatment was consistently or finally disadvantageous.

"Unimproved" means neither better nor worse finally. During treatment several of these cases were alternately much better and much worse. These hypersensitive patients are the ones in whom ordinary doses of vaccine seem to "bring out the disease" temporarily.

"Fair" means definite subjective or objective improvement, but no complete relief from symptoms for longer periods than the natural course of the disease provides for that individual.

"Good" means "Better in every way" or "better than I have been for years," or "30 to 80 per cent improved."

"Very good" means marked improvement or loss of disability, or relatively long remissions from symptoms. Sometimes it means a spectacular relief without complete return of constant health and strength. From "80 to 200 per cent better."

"Excellent" means apparently recovered for a sufficient number of months, and with sufficient speed to suggest that a permanent remission may be possible.

* * *

New cases	9 cases
Poor results	0 (in this series)
Unimproved (all hypersensitive)	8 cases (8.7% of treated cases)
Fair results in	7 cases (7.6%)
Good results in	37 cases (40%)
One was very good, but the patient quit treatment and relapsed.	
Very good results in	24 cases (27%)
Excellent results in	15 cases (16%)
Total	100 cases

CONCOMITANT THERAPY

One of the "very good" results counted above occurred in a 32-year-old woman with intermittent back pain. The relief may have been due in part to thyroid medication which she had never been given before. In all other cases there was no concomitant therapy which could have been expected to relieve the chronic condition. Patients with anemia are given ferrous sulphate, liver fraction, and Vitamin B_1 by mouth, but they have had plenty of these before without appreciable effect on their total condition. Several patients with digestive symptoms have been given bile salts without cathartic, but they have usually had such preparations before, and any good effect has been limited to the digestive system. Estrogens were continued in two cases; otherwise treatments for other supposed diagnoses were generally discontinued.

DIAGNOSTIC COMBINATIONS

The diagnosis is never made from any one test or from laboratory findings alone, or from clinical findings alone. It is always made from a synthesis of all obtainable evidence in each case. In this series 10 separate diagnostic factors are studied, *viz.*: history, skin test, fever, exclusion of other diseases, blood picture, opsonic test, agglutination test, physical findings including x-ray, blood culture, response and reaction to vaccine therapy. Mathematically these factors can occur in 967 combinations of three or more. For diagnostic significance only a much smaller number of combinations can qualify. In our study we found a total of 37 adequate combinations of the 10 diagnostic factors. Ten combinations accounted for 60 per cent of the diagnoses and were as follows, in the order of their frequency:

1. History, skin test, fever, exclusion, response.
2. History, skin test, fever, exclusion, blood picture, response.
3. History, skin test, blood picture, response.
4. History, skin test, exclusion, blood picture, response.
5. History, skin test, fever, response.
6. History, skin test, fever, exclusion, blood picture, opsonic, response.
7. History, skin test, fever, exclusion, opsonic, response.
8. History, skin test, fever, blood picture, opsonic.
9. History, skin test, fever, blood picture, response.
10. History, skin test, exclusion, response.

In individual cases the strength and significance of the diagnostic factors may differ widely from the order in which they are listed above. "History" includes symptomatology, duration, source, and course.

SUMMARY AND CONCLUSIONS

1. The diagnosis of 100 cases of chronic brucellosis appears to be firmly established by an analysis of all the data. These cases form the basis of this study.

2. The diagnosis is based chiefly upon a searching history, the exclusion of other diseases, positive intradermal tests, properly done, certain combinations of about ten other tests and findings, and the patient's response to Brucella vaccine therapy.

3. The agglutination test is usually the least valuable of tests for chronic brucellosis, but it should not be discarded.

4. The skin test is most valuable and most easily misused. Great care should be taken not to increase the patient's sensitivity to Brucella.

5. The relative importance of the other tests in the diagnostic analysis is estimated. The laboratory offers no test or tests which can substitute for thorough study and keen clinical judgment.

6. The diagnosis is difficult chiefly because of (a) the protean nature of the disease, (b) the inadequacy of laboratory tests for proving or disproving the diagnosis, and (c) the time and expense involved in ruling out many other diseases with which it is easily confused.

7. Chronic brucellosis in man is a very important cause of ill-health, especially in areas where the infection is not controlled in dairy herds. This study appears to support the newer concept[1, 5, 6, 7, 11] of the nature of Brucella infection in man.

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MENTAL ILLNESS: ITS EARLY SIGNS*

RÔLE OF THE FAMILY PHYSICIAN

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THERE is a fundamental difference between psychiatry and all other branches of medicine. A brief historical perspective leaves no doubt but that it was the suffering of the sick that created the primitive medical man, the ancestor of our present day highly-trained physician. Those who were physically sick never doubted their sickness, but loudly demanded help and relief from their pains, and the doctor had to respond and serve. From the earliest days of which we have record we find the doctor an idealized figure who, in turn, was expected to serve his patients with single-minded steadfastness and devotion.

When we turn to mental illness the historical picture changes completely. In the first place, the patient did not recognize himself as sick. A mind that is "lost" cannot surely be expected to take the lead in searching for itself. Moreover, he was often the first to insist that if any discrepancy existed between his ideas and those of the community, it was the latter who were unenlightened and out of step. The phenomena of mental illness were frequently so impressive that the baffled community was forced to concede the presence of supernatural powers, and delegated their religious authority to deal with those who were thus set apart from normal mortals. Thus began the insulation of the manifestations of mental illness from the inquiring but unhallowed touch of the scientist; and when, several milleniums later, the scientist first suggested that mental illness was a result of natural causes, he was met by terrific and passionate resistance to the point of persecution.

So it was that, whereas sickness created doctors, doctors working against the law of the State and the will of established religious faiths, created psychiatrists. This occurred only a few centuries ago, and the conquest of the field of mental disease by medicine is still far from complete. In no other field of disease is there such a preference for quackery in the form of "guidance" by amateurs, lay and clerical, and in no other field is it so necessary to refresh the thinking of the medical profession itself as to the aims and techniques of the group of specialists who are working in it. Mark Twain's "damned human race," and he

In spite of the brief span of years during which mental illness has been considered a pathological entity, we are today faced with the somewhat paradoxical fact that our facilities for the care of these patients are being strained to the utmost. We can reduce this pressure on our mental hospitals by prevention, and by early diagnosis and treatment. As with chronic disease in general, early recognition will not only reduce the duration of treatment, but may obviate the need for hospitalization entirely. What has been said above by way of introduction, shows quite clearly why the burden of this task of early recognition falls, not upon the shoulders of the psychiatrist, whose practice is largely referred, but upon the general practitioner and family doctor. He is the one to whom patients and the families of patients, first bring their problems, and it is he who can take the initiative in bringing to the attention of patient, or family, the existence of mental illness. The family doctor sees his patients in their sickness and trouble over a period of years. He watches the children develop and notes the interplay between parents and children, and between the children and the world in which they live. People go to their doctors, not in order to demonstrate their strength and achievement but, rather, to confide their weakness and their failure. No one has a better chance than the physician to learn what lies behind dissimulation and the social mask. It is this type of relationship and the consequent wide knowledge of human nature which, should he be so inclined, qualifies the family doctor to recognize and deal with the early symptoms of mental illness.

BASIC CRITERIA OF MENTAL HEALTH

The basic criteria of mental health are simple and depend only upon common sense for their evaluation. They are these: Are the objectives for which the person is striving understandable, and in harmony with his personality, and are the means employed to bring about this end functionally effective, and economical? As with all simple criteria, they are much easier to state than to apply. In other words, they have the limitations of any measuring-rods applied to human nature; but surely there is no one better equipped than the experienced physician to use them competently and wisely. He is specially informed as to the vagaries of human nature, and knows that there are those of us who are steady and predictable from our earliest years, whereas others are eccentric or whimsical. He is less apt to look upon any given behavior as an isolated phenomenon, but will rather place it within the background of the total personality. He knows what may reasonably be expected of Johnny Johnson or Sammy Smith, when the one is apt to get into trouble or when the other may be expected to achieve success. He knows a good deal about

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knows about his individual patients as well. He can estimate the sum total of quirks and idiosyncrasies in his patients, and he knows that any sharp increase in the number of these indicates that something is afoot which may soon require special attention. If their actions are in accord with achieving what is for them a reasonable goal he need not be concerned; but if their actions are out of harmony with their potentialities, and no longer clearly effective and understandable in the light of the individual's personal history, the family physician is faced with the basic phenomenon of mental illness.

BEHAVIOR PROBLEMS OF CHILDREN

The clearest view of types of behavior which are abnormal can best be obtained by looking at the behavior problems of children. This is true not only because we all have a good idea of what to expect from any child of a given age but, also, because there is not a single symptom in the vast catalogue of psychopathology which does not have its roots in childhood and cannot be observed as a simply entity in the early years. The truth of the old adage that the child is father to the man is nowhere more forcefully exemplified than in the field of psychiatry. We must remember, however, that what may be a psychotic symptom in later years is not necessarily even abnormal in a child. It is a matter of degree and extent, and only when there is interference with the ordinary life of the child, or extreme concern on the part of the parents leading them to upset his usual way of doing things, do we speak of behavior disorder, or abnormality. While this warning may be pertinent in a psychiatric discussion, it is more usual to find that parents and doctors tend to minimize childhood maladjustments. In the hope that they will be outgrown, they are allowed to become fixed and progressively to handicap later development in increasing degree.

The most noticeable abnormal behavior in children is that characterized by a discrepancy between the type of action and what is ordinarily to be expected at a given age. We expect a baby to wet the bed, but not a 3-year old. We expect a 3-year old to attempt to trim the dog's ears with a pair of scissors, but not a 5-year old. We expect the 5-year old to ask to hear the old familiar story in preference to the new, but not the 9-year old. When we observe similar phenomena in adults, expressed in terms of goals and strivings, we speak of regression or fixation.

CLASSIFICATION OF BEHAVIOR DISORDERS OF CHILDREN

The behavior disorders of childhood can be broadly classified as those referable to the body and those referable to the outside world, the latter being what are known as social reactions. These disorders, with their derivatives and elaborations, constitute the symptomatology of adult life as well. So far as reactions referable to the body are concerned, we can name such as nail-biting, thumb-sucking, bed-wetting, failure in bowel training and body manipulations. These are the body attitudes which we find dominating the accounts of the childhood of the adult mentally-ill. The emphasis here should lie on the word "dominating," because all these reactions are also a part of normal development as well. The importance of degree takes precedence here over the importance of kind. It is only when these types of behavior become dominant and persistent, and interfere with development and the progression from one stage to the next, that they become of psychopathological importance. And a word of caution is appropriate here: all too often the suppression of a symptom, or unwanted type of behavior, is considered equivalent to eradication of the disorder itself. This is not the case. It is only when the symptom gives way to further developmental progress that it is eliminated; its suppression with the inevitable substitution by another, perhaps less obvious symptom, is not progress, but rather stagnation, and a mere postponement of the eventual settlement. All of these symptoms can be thought of in terms of time and energy wasted as well in terms of more elaborate theories of pleasure zones and psychosexual development; but the key to the problem is not the fact that they give gratification to the child, but that he desires this only in part. He himself is only too ready to forego whatever elemental pleasures may exist in these symptoms in favor of further development and the triumphs accompanying sublimation and achievement—provided he can find the road.

SYMPTOMATOLOGY OF SOCIAL REACTIONS

But let us turn to what we have referred to as the symptomatology of social reactions. Here we can name such behavior as withdrawal from the group, exaggerated dependence, inhibition of play, bullying, stealing, hates and resentments, and anxieties and phobias. Here again it is the degree of dominance and persistence that indicates the abnormal, rather than the particular content. And again we can say that it is not a preference on the part of the child that causes him to cling to the symptom. It is even more apparent here that even a minor triumph in the next developmental stage would be adequate compensation for relinquishing whatever pleasure might accompany the symptom. But it is again a question of finding the road. Whether dealing with children or with adults, it is safe to say that prohibition and correction serve no purpose. The problem of psychotherapy is always that of making available to the patient more adequate and more adult means of self-expression in terms of long-tested and socially acceptable modes. The patient who is completely trapped and deprived of adequate self-expression due to external limitations is probably nonexistent. In spite of what we have learned in recent years concerning the smallness of this globe whereon we exist, the

world is probably still a big enough place for the mature development of any one born into it.

This brings us back to the question of the purposefulness and usefulness of behavior, the economic attainment of an harmonious (egosyntonic) objective. This has been suggested as the criterion of mental health. One can see that it works out well when applied to these behavior disorders of children. It is also a therapeutic objective; but one can say very little concerning treatment in a paper designed to help the physician to recognize and understand these problems so that he can then apply his own common sense and experience to their solution. It is more profitable to go on to a brief consideration of the early symptomatology of mental illness in the period after childhood.

NEUROSES

The majority of mental cases that come to the attention of any doctor are the neuroses. The variety of clinical pictures presented are familiar to all of us. Once the physical health is assured the problem is to shift one's interest from the exaggeration and bizarreness of the complaints to the consideration of what they mean to the patient, and to the effect the illness has upon his successful functioning as a useful citizen. A surprising number of these milder mental illnesses find their way to hospitals eventually, and this outcome could often be prevented by sympathetic handling in the early stages, and by the patients being referred to a specialist at the moment it became obvious that symptoms were on the increase in spite of therapeutic efforts. The emphasis in recent years upon the psychosomatic concept in medicine has done much to help us realize that it is not the presence of gross, or microscopic, observable pathology that is important, but rather the functioning of the individual as a mind-body entity.

MANIC-DEPRESSIVE PSYCHOSIS

The family physician comes also into contact with the early stages of manic-depressive psychosis. The problem of recognition of mental illness is fairly simple here, but it is necessary to estimate correctly the extent of the illness and the speed of its progress. The manic phases move very rapidly, from the first indication that the patient's tremendous driving power is defeating his own ends to the point of helter-skelter activity with constant change of objective. The depressions move less rapidly, through minor complaints of mood change, insomnia, hypochondria and loss of weight, on to delusions and suicidal tendencies. The treatment in both types is essentially that provided by the mental hospital, but early recognition can markedly reduce the duration of illness.

DEMENTIA PRAECOX

The mental disease which fills far and away the largest proportion of hospital beds, and is also responsible for a great deal of economic failure, social unhappiness, and, also, many of our most sensational crimes, is dementia praecox, or what we have come to call the schizophrenias. The fact that the general public as well as the medical profession has become familiar with the descriptive, split-personality, does not make it any easier to recognize this disease in its early stages. The trouble is that these patients show so little upon which to base a diagnosis. The passive type, with his apparent lack of concern, or emotion, and the odd, impulsive type, with his emotional reactions out of proportion to the stimulus, are both difficult to recognize in their beginnings. But it is in just these cases that the criterion as to harmonious goal and effective action can be most helpful. The striking thing about the schizophrenic life-history is the apparent absence of understandable purposefulness in his behavior. Practically never do sensible goal and reasonable action coincide. Childish and even infantile behavior is prominent long before feelings of unreality and various types of hallucinations and delusions develop.

IN CONCLUSION

At the beginning of this paper I spoke of the difference in origin between psychiatry and the rest of medicine. There are other differences as well. One of these is the fact that pain, or fever, or a bleeding wound are known to all men. The doctor can identify directly with the suffering patient, and treat him with tenderness and sympathy. But to identify with and similarly treat a patient with mental disease requires a special psychological set. Every mental patient presents an inability or unwillingness to fit in with our social organization and could be considered either a rebel or a weakling. In fact the tendency so to consider him is something which must be overcome if one is to achieve the identification with the patient without which treatment cannot succeed. Another big difference between medicine and psychiatry is the fact that the former could take over directly the tools of physics and chemistry, and apply them to its progress. Psychiatry has had to forge its own tools and against inner as well as outer resistance. The insecurity of this position is obvious. We psychiatrists feel that we have the right to ask those who created us, the physicians in the other branches of medicine, to support us in our difficult task. We are more than pleased when we find other physicians interested in our work, and we shall do all in our power to increase this interest and to demonstrate the possible rewards in terms of community health which we believe our specialty to promise.

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The wise man will live as long as he ought, not as long as he can. . . . He always reflects concerning the quality, and not the quantity, of his life.

—Seneca, *Epistulae ad Lucilium*. Epis. lxx, 4. Quoted by Montaigne, *Essays*. Bk. ii, ch. 3.

CLINICAL NOTES AND CASE REPORTS

HEMATURIA AFTER MERCUROCHROME INSTILLATION INTO BLADDER

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THE use of mercurochrome has been applied to various surgical procedures, as well as to bladder instillations after catheterization, in an effort to prevent postoperative infections and to aid postoperative voiding.[1] Reports of untoward reactions to this antiseptic are so infrequent that the occurrence of hematuria after instillation of 5 per cent aqueous mercurochrome solution is thought worthy of note.

REPORT OF CASE

CASE 1.—D. M. S., Reg. No. 15942, a white male, aged 27 years, was hospitalized at Station Hospital, Fort Ord, California, on February 11, 1942, for the treatment of a left indirect inguinal hernia of two months' duration. The past history was uneventful and the patient did not mention sensitivity to any drugs or chemicals.

During the preliminary examination, on February 16, the patient developed a left lobar pneumonia which was treated and cured with the aid of sulfathiazole, grams 44, over a period of three weeks. Urinalyses, prior to and during the administration of sulfathiazole, were normal in all respects.

On March 11, 1942, a herniaplasty was performed for the cure of the left inguinal hernia, using a spinal anesthetic, novocaine 100 mg. and nupercaine 2 c.c. The operation was uneventful. Following operation, the patient was unable to void and was catheterized in about 18 hours. Some 450 c.c. of clear urine were evacuated and 5 c.c. of 5 per cent aqueous mercurochrome solution was instilled before the catheter was removed.

The patient was able to void in about 8 hours, passing reddish urine. At this time an erythematous rash of the face and chest was noted. The operative site which had been painted with tincture of merthiolate showed no evidence of reaction. Urinary symptoms at the onset consisted of hourly frequency of voiding with severe burning during the act. The urine was noted to be grossly bloody. The patient was given bladder sedatives of tincture of belladonna and tincture of opium, together with pyridium tablets. There was a gradual relief of frequency and dysuria on this régime, which also included a moderate decrease in fluid intake in order to decrease bladder contractions. All symptoms had cleared by March 17, 1942, 6 days postoperative and approximately 5 days after the instillation of mercurochrome.

Urinalyses:

Feb. 14, 1942	(Preoperative)	Albumin neg., micros. neg.
Mar. 13, 1942	(2 days P.O.)	Alb. 4, packed with rbc.
Mar. 15, 1942	(4 days P.O.)	Alb. 4, packed with rbc.
Mar. 16, 1942	(5 days P.O.)	Alb. neg., numerous rbc.
Mar. 17, 1942	(6 days P.O.)	Alb. neg., several rbc.
Mar. 21, 1942	(10 days P.O.)	Alb. neg., micros. neg.

The urine output was normal throughout, while the postoperative temperature from March 11, 1942 to March 16, 1942, varied from 100 F. to 101 F., then gradually receded to normal on March 20, 1942.

Cystoscopy was performed on March 30, 1942, 19 days postoperative, using 5 per cent procaine intraurethrally as an anesthetic. The cystoscope, which had been sterilized in mercury-oxycyanide, was carefully washed with distilled water. Examination revealed a mild generalized cystitis, no other evidence of pathology being seen.

On March 31, 1942, the patient was skin-tested, with the application of a surgical solution of 2 per cent mercurochrome, on the inner aspect of the right forearm, and tincture merthiolate on the left forearm. In 12 hours there was slight redness about the edges of the mercurochrome patch, with no reaction where the merthiolate was applied.

Further questioning revealed that the patient had had eczema as a child. At the age of 21 years a mercurochrome salve was applied to the extremities for a skin infection; the application was followed by swelling of the extremities, as did a test application for sensitivity at a later date.

Upper urinary tract investigation was not done because of the past history of sensitivity to mercurochrome, the rapidity of onset of symptoms after instillation, and the clearance of symptoms as would be expected. Of course, any urinary bleeding in the future not definitely related to a drug reaction should have complete urographic study.

COMMENT

Reports of acute poisoning, after mercury-oxycyanide instillations following cystoscopy,[2] indicate the danger of that procedure; the reaction in the reported cases probably was due to a mercury intoxication rather than sensitivity. Hypersensitivity to mercurochrome by patch test was studied by Pascher and Silverberg,[3] who found that mercurochrome was the least likely of the mercury preparations to cause a dermatitis.

The importance of questioning patients as to sensitivity to drugs and antiseptic chemicals likely to be used in treatment is again brought out by this illustrative case, showing that even mercurochrome is not altogether innocuous.

Station Hospital, Fort Ord.

REFERENCES

1. Helfert, Irving and Granet, Emil: Prevention of Acute Retention Following Anorectal and Perineal Operations, Am. J. Surg., 53:125-126 (July), 1941.
2. Page, B. H., and Wilson, C.: Acute Poisoning After Cystoscopy, Lancet, 1:640-643 (April 6), 1940.
3. Pascher, Frances and Silverberg, M. G.: Hypersensitivity to Mercurochrome by Patch Test, Arch. Derm. and Syph., 27:408-410 (March), 1933.

"These are the times that try men's souls; the Summer Soldier and the Sunshine Patriot will, in this crisis, shrink from the service of his country, but he that stands it now deserves the love and thanks of Man and Woman."—Thomas Paine.

"This war is going to alter radically the lives of every one of us. It not only will alter our lives during the immediate years after the war, but it will alter the life on this planet throughout our lives and the lives of our children. And whether it is going to be the kind of a life in its influences and in its developments that we want it to be, and is going to be the kind of a life that will give us the most satisfaction in having lived, is going to be dependent on how we utilize these years that are right here now—on our understanding of what are the necessities of a post-war world."—Dr. Ernest Martin Hopkins, President, Dartmouth College.

CALIFORNIA MEDICAL ASSOCIATION

This department contains official notices, reports of county society proceedings and other information having to do with the State Association and its component county societies. The copy for the department is submitted by the State Association Secretary, to whom communications for this department should be sent. Rosters of State Association officers and committees and of component county societies and affiliated organizations, are printed in the front advertising section on pages 2, 4 and 6.

CALIFORNIA MEDICAL ASSOCIATION†

WILLIAM R. MOLONY, SR., M.D.....President
KARL L. SCHAUPP, M.D.....President-Elect
LOWELL S. GOIN, M.D.....Speaker
PHILIP K. GILMAN, M.D.....Council Chairman
GEORGE H. KRESS, M.D..Secretary-Treasurer and Editor
JOHN HUNTON.....Executive Secretary

† For complete roster of officers, see advertising pages 2, 4, and 6.

OFFICIAL CALL

To the Officers and Members of the California Medical Association:

The seventy-second annual session of the California Medical Association will be held at Hotel Biltmore, in Los Angeles, on Sunday, May 2nd, and Monday, May 3rd, Nineteen hundred and forty-three.

The House of Delegates will convene on Sunday, May 2nd, at 12:00 o'clock noon.

The Scientific Assembly of the Association will open with the General Meeting, held on Sunday, May 2nd, at 9:00 A.M. General Meetings will also be held on Sunday afternoon and Monday morning.

The Council will convene for its first annual session meeting on Saturday, May 1st.

The twelve Scientific Sections of the Scientific Assembly will meet Monday afternoon, May 3rd, at 1:30 o'clock.

WILLIAM R. MOLONY, SR., *President.*
LOWELL S. GOIN, *Speaker, House of Delegates.*
PHILIP K. GILMAN, *Chairman, Council.*

ATTEST:
GEORGE H. KRESS, *Secretary.*
San Francisco, California, February 23, 1943.

OFFICIAL NOTICE

EXECUTIVE COMMITTEE OF THE CALIFORNIA MEDICAL ASSOCIATION

Abstract of Minutes: California Medical Association Executive Committee*

Minutes of the One Hundred Eightieth (180th) Meeting of the Executive Committee of the California Medical Association

The one hundred eightieth (180th) meeting of the C.M.A. Executive Committee was held in the offices of the Association, 450 Sutter Building, San Francisco, on Sunday, February 7, 1943, the meeting being called to order at 11:00 a.m. by Chairman Henry S. Rogers.

1. **Roll Call:**

Present: Henry S. Rogers, Chairman; William R. Molony, Sr., Karl L. Schaupp, Lowell S. Goin, Philip K. Gilman, John W. Cline, George H. Kress.

Present by invitation: Executive Secretary John Hunton, Legal Counsel Hartley F. Peart, and Associate Counsel, Mr. Howard Hassard.

2. **Minutes:**

Minutes of the one hundred seventy-ninth meeting of the C.M.A. Executive Committee, printed in the January issue of CALIFORNIA AND WESTERN MEDICINE on pages 21-23, were approved.

3. **Membership:**

(a) Report was made by Executive Secretary Hunton on membership, as of January 30, 1943, the same being received and filed.

(b) A list of some six members, whose dues for 1942 were paid subsequent to September 13, 1942, was submitted, and on motion duly made and seconded, it was voted that the aforesaid members be reinstated into membership.

* Full minutes of the Executive Committee meeting have been mailed to all councilors, and copies are also available for inspection in the central office of the Association.

(c) On motion duly made and seconded, it was voted that Retired Membership be granted to the following members:

H. L. McCarthy, M. D., Los Angeles County.
Charles E. Sisson, M. D., Los Angeles County.
Lewis Sayre Mace, M. D., San Francisco County.
Horace G. Lazelle, M. D., San Diego County.

(d) Yolo County Medical Society submitted the name of W. J. Blevins, M. D., for Life Membership; and on motion duly made and seconded, the same was granted.

(e) Discussion took place on whether members of the Association who were in the U. S. Public Health Service should be exempted from payment of State Association dues. It was agreed that the Legal Counsel should prepare a report thereon for submittal at the Council meeting of February 28th.

4. **Financial:**

(a) A report was made by Executive Secretary Hunton on finances, as of January 30, 1943, and the same was received and placed on file.

(b) It was reported that the Basic Science campaign had necessitated the expenditure of $6,918.63 in excess of previous appropriations. On motion duly made and seconded, it was voted that the same be approved.

(c) The possible need of the sum of $2,000 as a budget allocation for assistance in the work of "Medical Participation in the War Effort," with particular reference to Procurement and Assignment Service requirements, was discussed. It was agreed that this matter should lie over for consideration by the Council.

(d) It was voted that the sum of $15,000 be transferred from the funds of the California Medical Association as part payment on a loan that had been granted by the Trustees of the California Medical Association. (Repayment to Trustees.)

(e) The Auditing Committee, through its Chairman, John Cline, submitted a proposed budget for the calendar year 1944. Discussion followed. Upon motion duly made and seconded, it was voted to approve the report of the Auditing Committee, and to submit the same to the Council at its meeting on February 28th.

5. **Annual Session:**

For the Committee on Scientific Work, its Chairman, Dr. Kress, made report concerning the tentative outline for this year's Annual Session, to be held in Hotel Biltmore, Los Angeles, May 2-3, 1943.

The skeleton arrangement comprehends three General Sessions, the first on Sunday morning, May 2nd, for organization and some scientific work; the second on Sunday afternoon, and the third on Monday morning. All meetings of Scientific Sections will be held on Monday afternoon.

The major topics agreed upon were to come under the following heads:

(a) Communicable Diseases (emphasis on tropical and other wartime infections.)

(b) Practical points in civilian disaster relief (shock, burns and other related matters.)

(c) Nutrition Problems (good nutrition despite food shortage, etc.)

(d) New Problems in Wartime Industry.

The C.M.A. Committee on Scientific Work also recommended that three guest speakers be invited in accord with past custom, and it was so voted.

It was stated that military colleagues attached to some of the hospitals and camps in California, who had been contacted, had expressed willingness to take part and report on some of the more recent work.

6. **Report on "Doctor Shortage" Questionnaires:**

Report was submitted on the replies which had been received from component county medical societies concerning doctor shortage in their respective areas. The report indicated that serious shortages existed in only a very small number of cases.

It was stated that reports thus far not submitted should be available within the next 10 days, so that a break-down and full report could be made for the Council meeting on February 28th.

7. **Amendments to Medical Practice Act:**

For the Committee on Legislation, report was made that the California Medical Association had submitted no amendments to the Medical Practice Act at the January Session of the Legislature; further, that the Board of Medical Examiners had taken the matter in hand through amendments that would permit examinations to be more frequently held by committees of the Board, with provision that mail vote of the entire Board could be promptly taken, so that licensure of qualified physicians could be expedited.

8. **Vacancies on State Boards:**

Informal discussion took place concerning vacancies on the State Board of Medical Examiners and the State Board of Public Health.

9. **Annual Conference of County Association Secretaries:**

The Association Secretary reported that a mail vote of the Council was in favor of not holding, in the year 1943, a conference meeting of the Secretaries of component county societies, Chairmen of State Association committees, and Officers of the Association.

10. **Distribution of Professional Service—Industrial Accident Commission:**

President Molony brought up for consideration a recent New York law concerning industrial commission work which had as its object a more equitable distribution of professional service among licensed physicians. General discussion followed. Dr. Cline spoke of the investigations that had been made in the last two years and called attention to some of the difficulties that had been encountered in trying to work out panels of available physicians in such manner as to be satisfactory to all interested, and at the same time make for a betterment of existing conditions. He stated that in the last and present Legislatures, bills had been submitted with such objectives in view.

President Molony added he would strive to obtain more detailed information from colleagues in New York.

11. **Fee Schedule—Industrial Accident Commission:**

Legal Counsel Peart reported on conferences that had been held during the last month with representatives of the Industrial Accident Commission, specialty groups, and others. He stated that the papers and proposed fee tables had been filed with the Industrial Accident Commission, and would come up for public hearing on February 15, 1943.

Mr. Peart outlined the reasons on which the petition for increase in professional fee rates was based.

12. **California Physicians' Service and Hospital Service of California: Proposed Survey of Medical Service and Hospitalization Plans:**

Discussion then took place on the special purpose of the present Executive Committee meeting, namely, the situation which had arisen in relation to California Physicians' Service and Hospital Service of California (Oakland), through action by the medical service organization taking on hospitalization care, and the hospitalization organization offering contracts for medical service.

The history of the proceedings that had led up to the now existing conditions was covered by several speakers in order that all should have a proper orientation of the

situation. It was finally agreed that some of the things that had taken place could not now be easily rectified, the problem being as to what could be done immediately in bringing about an improvement of conditions that were not working to the best interests of the medical profession or of the organizations.

In the discussion, it was brought out that on February 8th, the American Hospital Association would hold a meeting in Chicago, and it was possible that the California situation might come up for consideration.

Council Chairman Gilman called attention to some informal conferences that had been held at which it had been suggested that it might be advisable to bring to California some person experienced in medical service and hospitalization plan work, to make a survey of existing conditions and to bring in a report thereon.

Some informal communications dealing with this matter were then submitted, the same being placed in the filed.

It was pointed out that California Physicians' Service had offered hospitalization contracts, that Hospital Service of California was offering medical indemnity contracts, that the existing set-up made for duplication, and was not conducive to attainment of the major objectives which the California Medical Association had in mind when California Physicians' Service was brought into being.

Full discussion took place on what would be the advantages of a survey, and, if a survey were to be made, under what conditions the same should be conducted, and who would be the person selected for the task.

Motion was made by Goin, seconded by Cline, that if a survey were made, the same should cover a definite task; a date for its completion should be stipulated; and whoever was selected to make the survey should be employed by the California Medical Association; that the survey would automatically become the property of the California Medical Association; and that the survey could not be published except by the California Medical Association or with its permission. This motion was tabled to allow further discussion.

Upon motion by Gilman, seconded by Cline, it was voted that the survey, insofar as concerns C.P.S., should be limited to the private activities of C.P.S., its Governmental activities not to be a subject coming within the scope of the survey.

Vote was then taken on the original motion by Dr. Goin which had been tabled. It was voted to reconsider the items therein.

Upon motion by Cline, seconded by Schaupp, it was then voted as follows: that any agreement made with the person designated to make the survey should be in writing; that the scope of the survey should be confined to the respective activities of medical service and hospitalization plans, and how the same may be promoted to best advantage of the organizations involved and the public welfare.

It was voted that, for the purpose of making the survey, and while making the survey, any person employed should be the representative of the California Medical Association.

It was voted that, in making the survey, the surveyor should be governed in his statements concerning the respective spheres of medical service and hospitalization care by the definitions of hospital care as have been laid down by the A.M.A. House of Delegates.

Upon motion by Cline, it was voted that the maximum cost of the survey be limited to $1,500 and the same to be completed within 60 days from February 8th.

On motion by Cline, seconded by Schaupp, it was voted that John Mannix of the Michigan Medical Service be invited to make a survey under conditions as outlined.

Discussion then took place concerning various persons other than John Mannix who were worthy of consideration for such work, the names of two others being mentioned. Motion was made by Dr. Goin that the name of one of those be substituted. The motion did not receive a second. The vote to employ Mr. Mannix was in favor thereof, but Dr. Goin wished his vote recorded in the negative.

On motion made by Goin, duly seconded, it was voted that when and if Hospital Service of California confines itself to hospitalization care, then California Physicians' Service should confine its work to private beneficiary members for medical service.

There being no further business, adjournment then took place.

HENRY S. ROGERS, M. D., *Chairman.*
GEORGE H. KRESS, M. D., *Secretary.*

CALIFORNIA COMMITTEE ON PARTICIPATION OF THE MEDICAL PROFESSION IN THE WAR EFFORT†

Medical Journals—For Colleagues in Military Service:

In former issues editorial comment was made on a plan to forward medical journals to the Hospital Stations of Army, Navy and Air Force camps now located in California.

This work is being carried on by the California Medical Association—through its Committee on Postgraduate Activities—in coöperation with the medical libraries of the University of California, Stanford, and the Los Angeles County Medical Association.

The addresses of the three libraries follow:

U. C. Medical Library, The Medical Center, 3rd and Parnassus, San Francisco, California.

Lane Medical Library, Clay and Webster Streets, San Francisco, California.

Los Angeles County Medical Library Association, 634 South Westlake, Los Angeles, California.

If more convenient, you can send journals, via "Railway Express Agency," collect, to: C.M.A. Postgraduate Committee, Room 2008, Four Fifty Sutter, San Francisco, California. Railway Express Agency addresses: In San Francisco, at 635 Folsom (EX 3100); in Los Angeles, at 357 Aliso (MU 0261).

† Harold A. Fletcher, M. D., 490 Post Street, San Francisco, is the State chairman on Procurement and Assignment Service, with supervision of all counties north of the fourteen southern counties.

Associate California chairman for the fourteen southern counties is Edward M. Pallette, M. D., 1930 Wilshire Boulevard, Los Angeles.

Doctors desiring to go into the Army may have their papers prepared and receive orders for physical examination from the Officer Procurement Service, 328 Flood Building, San Francisco, in charge.

From any of the fourteen southern counties, they may apply to the Officer Procurement Service, 1418 U. S. Post Office and Courthouse Building, Los Angeles, Major M. L. Murrell, in charge. Telephone: MAdison 7411, Extension 684.

The Office of Naval Officer Procurement for the northern section of California is in charge of Capt. C. L. Arnold, U.S.N. The Senior Medical Officer is Capt. Philip K. Gilman, U.S.N.R. The office is located at Room 515, 703 Market Street, San Francisco. Telephone: EXbrook 3386, Local 46.

The Naval Office of Procurement for the southern section of California is in charge of Admiral A. Johnson, U.S.N. The Senior Medical Officer is Captain John C. Ruddock, U.S.N.R. The office is located at 411 West Fifth Street, N.W. Corner of Hill, Los Angeles. Telephone: MIchigan 8641.

PRO PATRIA

THREE LETTERS FROM SAN FRANCISCO COLLEAGUES

Note. The Editor will be pleased to receive letters from C.M.A. members, who in turn have heard from colleagues in military service. (The original letters will be returned after "copy" has been set in print.)

Members of the Association, who are in service with the Armed Forces in the United States or elsewhere, are also invited to write the Editor concerning their experiences. Colleagues in civilian practice will be happy to hear from you.—Ed.

* * *

(COPY)

From Lt. F. H. Moore, M.C., Marine Corps Unit 725, Fleet Postmaster, S. F.

Guadalcanal, December 9, 1942.

Dear Cobbie:

Just a line to say hello from the Solomons. Was attached to the Marine Aircraft Wing early in October, left San Diego on October 15th and landed in New Caledonia October 28th. After a month there, I was flown up here and am in charge of evacuating sick and wounded by transport planes to base hospitals in safer areas. Am also in charge of a Squadron. Have a swell job, and am sure you would get a kick out of seeing these big air ambulances haul our patients out.

Things are relatively quiet now, although we have had several heavy naval engagements offshore which we could hear, and one night bombing. The land fighting goes on right along with our Marines pushing ahead, bit by bit, in jungle fighting. I went up within 400 yards of the front lines this morning and saw many Jap dugouts which had been recently taken, with a little earth dumped over the previous occupants; and many items such as shoes, helmets, knapsacks, and gas masks still lying about. Could hear desultory gun fire up ahead all along.

On December 7th I went around with Arthur Menken, the famous war correspondent and now Marine Photographer, to photograph an anniversary shelling of the Jap positions. We saw a whole afternoon of it—75s, 105s, 155s, and mortars. I imagine it didn't seem funny to the Japs as it did a year ago.

Today was over at the prisoner's stockade and saw about 30 rather sullen Nipponese who didn't realize their luck in being alive and eating Yankee food. The gate to the stockade is left wide open and a Marine with a tommy gun sits hopefully in front of it.

Have seen quite a bit of bacillary dysentery and subtertian malaria, hence sulfeguanidine, atabrin, and quinine are the big drugs. The weather is hot 4+ and humid 4++, so one drips most of the time. My tent and First Aid Station is right in jungle. Boy, when I was in practice in San Francisco, was I ever an internist? Not now!

I am enclosing a snapshot taken in front of the famous hill on which the Jap flag flew,—now the old Stars and Stripes wave there, and I never fail to thrill at it when I see our flag.

Hope all goes well with the bunch at 384 Post, and wish you would tell them hello for me. . . .

Your friend,

FERRALL.

Trust you have heard good news from John by now.

(COPY)

From Major R. F. Escamilla, 59th Evacuation Hospital, APO-668—New York, N. Y.

Somewhere in Africa, January 27, 1942.

Dear Al:

When I crawl into my sleeping bag at night, and the African Sirocco makes the tent flap, and my mosquito netting bounces up and down, I often wonder how the hell things are going back in San Francisco. I would appreciate it very much if you would write me a letter once in a while—full of news, especially about my old friends there. The mail seems to move in very slowly, so suggest air-mail, if you do find time to write. . . .

Africa is interesting, but up to the time of this writing, where I am, we are not busy enough to keep from being bored most of the time. The trip across was comfortable and uneventful, and the only sign of war so far has been one very minor air-raid. Our hospital is partially open, under tents, but most of our cases are convalescent; so—from our point of view—not very exciting. Local humor is so far practically nonexistent. However, I have picked up one ditty about "Dirty Gertie from Dizerta," that I'll save for my first evening back at the Family Club.

Remember me to the gang, and tell the home docs that we don't want any new ways to practice medicine when we get back.

Best wishes,

(Signed) BOB.

From Major Paul C. Sampson, Lawson General Hospital, Atlanta, Ga.

(COPY)

2nd Aux. Surg. Gp.
LAWSON GENERAL HOSPITAL
Atlanta, Georgia

February 16, 1943.

Dear Doctor Kress:

It was indeed good to hear from you—and I certainly appreciate your prompt and favorable consideration of my little contribution to C. and W. M.

Those of us who are about to leave for parts unknown are more appreciative than we can say of the thoughts and good wishes of you on the home front. We do thank you—and hope that our pleasant and cordial friendship can be renewed in the days to come.

Most sincerely,

PAUL C. SAMPSON, *Major, M.C.*

Irwin Blood Bank of San Francisco County Medical Society Donates Huge Amount of Plasma

The Irwin Memorial Blood Bank donated 1,382 bottles of life-saving plasma, worth over $33,000 at commercial prices, to San Francisco hospitals as disaster protection during the past year.

In addition to creation of an emergency supply of plasma for use in the event of any major disaster, the year-end report of the San Francisco County Medical Society's Blood Bank Commission disclosed the Irwin Blood Bank regularly supplied whole blood at cost to twenty hospitals in San Francisco and twelve hospitals in the adjacent area. During the year 5,785 pints of whole blood were dispensed in this program.

To cut the time of drying plasma from the present four days to twenty-four hours, the blood bank will receive next month a new combined plasma "sheller, freezer, and dryer." Now being tested in Chicago, the first ten such mechanisms in the United States are nearly ready for distribution.

In a Hospital On Guadalcanal—

200 Yards from the Front, Your Blood Helps Beat the Enemy

Guadalcanal, Nov. 30.— (Delayed) — Since daybreak United States Marines have been pushing through the swamp and jungle. The tirade of machine guns, viciously punctuated by fire from enemy field pieces, has taken its toll during the fiercely fought battle.

Only 200 yards behind the front line, another battle is being fought. The Navy Medical Corps, attached to the Marine unit is working against death. The advance dressing station, with its group of stretchers and litter of medical supplies, is pitched where the trees offer maximum protection and cover.

As the doctors and corpsmen work intently, six men struggle through the jungle trail to the station with a stretcher. They are carrying a Marine whose arm has been torn off by machine gun fire. To this lay eye he appears lifeless.

A doctor produces two small flasks. One is filled with distilled water; the other with a substance that looks like fine sawdust. Quickly the water is drawn by vacuum into the second flask, forming a straw-colored liquid. The doctor agitates the flask to dissolve all the sawdust-like substance. Then deft hands jab a needle into the Marine's limp veins, and slowly the liquid drains through a rubber tube.

Perhaps the process has taken eight minutes, perhaps fifteen. Visibly the color comes back into the man's face; perceptibly his pulse quickens and his body regains its heat. The regeneration is complete.

The work of the field doctors is done. One more live Marine will go back to the base hospital where he will receive all the refinements of hospital care.

Out in the field, the Navy Medical Corps swears by the desiccated blood plasma. It has been established beyond all reasonable doubt that a great number of field casualties would have died from shock or loss of blood had it not been for this simple transfusion.

In 10 weeks of action, during which over 100 casualties were treated in his advance dressing station, one doctor reports he has only lost three men. The answer he gives: Plasma.

The doctors in Guadalcanal tell many stories of its effectiveness. Lieutenant Commander William N. New (MC), U.S.N., of Guthrie, Okla., chief surgeon for this force of Marines, said, "The other day four men in very bad shape were brought into the sick bay. Those four were definitely saved by emergency transfusions."...

Plasma is easy to carry and easy to administer, even with the limited facilities of an advance dressing station. Doctors prefer to give the plasma transfusions themselves, but agree corpsmen are perfectly capable of administering it.

It can be given to any blood type because it is compounded from a stockpile of all types.

"Plasma is one of the great developments of wartime medicine," said Dr. New. "We can never have enough of it."—San Francisco *Chronicle*.

* * *

Wartime Control of Venereal Diseases: Rôle of Pharmacists

Pharmacists are playing an important rôle in the wartime control of venereal diseases, the American Social Hygiene Association announced recently, in making available to the medical profession a report based on a recently completed survey.

Drug store counter prescribing for syphilis and gonorrhea has greatly decreased, the Association reports. Forty-six cities in fifteen States were visited, and 716 drug stores studied. Only 11 per cent of the drug stores visited offered diagnosis and treatment for conditions presumed to be syphilis and gonorrhea. Thirty-two per cent sold remedies on specific request but did not attempt to diagnose, and 57 per cent urged immediate and well qualified medical care, and in a large proportion of the drug stores where remedies are stocked and sold, the druggist advised that "self-medication is bad and dangerous business."

This survey showed a decided improvement over conditions found in 1939 and 1940. . . .

The report of the survey was published in "Venereal Disease Information" in January, 1940. It received wide publicity and led to the formation of the Joint Committee of the American Pharmaceutical Association and the American Social Hygiene Association, organized to bring about closer coöperation between physicians and the pharmacists in eradicating syphilis and gonorrhea. This committee has constantly urged druggists to follow, with reference to venereal diseases, the principles of ethical practice enumerated below:

1. The pharmacist should make no diagnosis.
2. The pharmacist should not prescribe for patients.
3. The pharmacist should refer patients to physicians.
4. The pharmacist should not sell "patent medicines" and thus encourage self-medication of these infectious diseases.
5. The pharmacist should distribute literature of an informational nature regarding syphilis and gonorrhea. Such material may be obtained from health departments and from the American Social Hygiene Association.
6. The pharmacist should coöperate with the pharmaceutical society and official and voluntary health agencies in promoting high professional standards.
7. The pharmacist should stock and sell only reliable products for chemical and mechanical prophylaxis of venereal diseases, and provide reliable information regarding the value and limitations of accepted prophylactics used under approved conditions.

When subsequent soundings were made during 1940 in many of the thirty-five cities originally studied, a decided trend away from the former conditions was discernible. In many drug stores where diagnosis and treatment had been offered, counter prescribing and the sale of nostrums were no longer practiced. In their places many druggists recommended competent physicians and various venereal disease clinics. This trend away from counter prescribing for venereal diseases has continued as proven by the recent 1942 survey.

Military Clippings—Some news items of a military nature from the daily press follow:

Medical Science Saves Lives

A happier and encouraging picture for the New Year are the figures on saving the lives of men wounded in battle in World War II. Rear Admiral Ross T. McIntire, Navy's Surgeon General, recently told the medical students of Northwestern University that the Russians claim an astounding record in saving the wounded—only 1.5 per cent, exclusive of those killed in battle, die of their wounds. For the U. S., the record is even better, though on a smaller scale. On Guadalcanal, less than 1 per cent have died, compared to 7 per cent in World War I. In one specific type of wound, the percentage is amazing—only 5 per cent die as against 70 per cent to 80 per cent in World War I.

Due to these splendid advances in medical treatment, many a boy will return home who might otherwise have died.—Porterville *Recorder*, January 19.

State Draft Boards: Warren Gives Courts Final Say On New Appointments

Removal of all politics from the selection of local, advisory and appeal draft boards throughout California was announced yesterday by Governor Warren.

Hereafter, a policy will be followed of making all appointments subject to recommendation by Superior and Appellate Judges before they are forwarded to President Roosevelt for his formal action.

"It is not my intention to disturb existing local boards, appeal boards or other personnel presently engaged in the administration of selective service in California," said the Governor.

He said he was clarifying "the atmosphere in regard to procedure for filling actual vacancies which require recommendation or appointment by the Governor."

Warren asked Chief Justice Phil S. Gibson of the State Supreme Court for the support and coöperation of the Judicial Council, of which Gibson is chairman. He said: "It is my belief that the Judges and Justices will submit names without regard to politics, color, race or creed and solely on the basis of character and ability to perform the task."

Whenever a vacancy occurs on a local draft board, Warren said, the presiding Superior Court Judge in the county will recommend a successor. Whenever a chairman of the advisory board for registrants resigns, the Superior Judge will recommend the name of a new chairman under Warren's plan.

Vacancies on appeal boards will be filled by recommendations from Justices of the District Courts of Appeal.

"I am doing this," said the Governor, "because the personnel of such boards is a matter of community concern, and therefore selection of membership should be left as much as possible in the hands of those thoroughly familiar with local conditions."

The Governor said 39 vacancies exist among the 284 local draft boards and four vacancies on the 20 appeal boards throughout the State.

Warren also is asking the State Bar to recommend appointments as appeal agents and associate appeal agents, the various county medical societies to recommend examining physicians and medical advisory board members, and the California Dental Association to recommend examining dentists. . . . —San Francisco *Chronicle*, February 11.

State Medical Rating High

California is still receiving a high standard of medical care and will continue to receive it, according to Dr. William R. Molony, Sr., president of the California Medical Association.

"A survey just completed by the California Medical Association shows that with very few exceptions the communities of this State have enough doctors to give the civilian population adequate medical care, Dr. Molony stated.

By pooling the efforts of doctors for emergencies and the relocation of physicians in rural districts, any shortage may be handled, he said.—Los Angeles *Examiner*, January 24.

Adequate Medical Help Is Promised Civilians

For the guidance of the civilian, Dr. Frank H. Lahey, chairman of the directing board, procurement and assignment service for physicians and veterinarians of the War Manpower Commission, recently laid down some simple rules, which he suggests be posted in some conspicuous place in every home:

1. Keep healthy. Get plenty of sleep, eat the proper foods, get plenty of fresh air, exercise and recreation.
2. Avoid unnecessary demands on the physician's time whenever possible; go to his office during office hours instead of asking him to call upon you at your home.
3. In case of really serious illness, do not delay in calling your doctor or calling at his office. It will save his time, if he is called promptly in any case of acute illness. This is not a contradiction of Point 2. It does, however, assume that the average citizen has good judgment. In doubtful cases, call the doctor at once.
4. Avail yourself of opportunities to study first aid, in order to know how to give care to the injured until such time as a doctor can take over.
5. In connection with Point 1, if you do not know the basic rules of nutrition, avail yourself of opportunities to learn the facts.

Yes, we know the physicians at home will do their part in assuming the added burdens imposed on them by the depletion in their ranks.

The civilian population should do its part as well.—Sacramento *Bee*, January 21.

Casualty Plan Calls Doctors

To carry out an elaborate program for hospitalization of civilian casualties of enemy raids or sabotage, 13 outstanding Southern California physicians are to be made Army officers and will be assigned to active duty in case of emergency.

This was announced here today by Dr. Charles F. Sebastian, chief medical officer in the Southern California sector for the United States Public Health Service, under assignment to the Office of Civilian Defense.

Numerous base hospitals will be set up in this sector for accommodating raid or sabotage victims and existing hospitals will also be used, Dr. Sebastian said.

Several hotel properties have been surveyed by the Army, it was also learned, with the view to condemning them in case of emergency, and using them as military hospitals.

Regular patients of hospitals will be moved to protected inland points, in case of such emergency, Dr. Sebastian said, with the government handling expenses of such a move.

The physicians selected met here yesterday for the first time to confer with Dr. Sebastian on completion of plans. Those from the Los Angeles area who have been chosen are Dr. Donald Cass, Dr. Sidney Burnap, Dr. Forrest Boyd, Dr. Howard West, Dr. George Piness, Dr. Phillip Cunnane, Dr. Fred B. Moor and Dr. Leroy Sherry, Pasadena.—Los Angeles *Herald and Express*, February 4.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

California Legislature—55th Session

The Public Health League of California has made a list of proposed laws having relation to medical and public health practice and standards. A glance at the summary reveals the large number of such proposed statutes, even though the 55th is a streamlined legislature with a record of 1,000 less bills introduced than in each of the last several sessions.

Members of the C.M.A. may wish to take the time to glance through the list. Further information can be obtained from the Secretary of the Public Health League, Mr. Ben Read, whose address appears in each issue of CALIFORNIA AND WESTERN MEDICINE, in the roster on advertising page 6.

Abbrevations:
AB means Assembly Bill.
SB means Senate Bill.

Chiropody (five bills).

AB 334, by Evans (referred to Committee on Public Health), extends definition of chiropody to include treatment of the leg. Prohibits recommendation of corrective shoes or appliances by persons other than physicians and surgeons and chiropodists.

AB 355, by Evans (referred to Committee on Public Health), permits supplying of hypodermic needles or syringes to chiropodists.

AB 1110, by Waters, Debs and Fourt (referred to Committee on Public Health), establishes State Chiropody Act, sets up California Chiropody Society to take over examinations and issuing of licenses to practice Chiropody, now under direction of State Board of Medical Examiners.

AB 1928, by Call (referred to Committee on Public Health), adds chiropody and chiropodists to sections of Health and Safety Code, Labor Code and School Code, relating to rights and privileges of physicians, surgeons, dentists, optometrists, osteopaths, chiropractors and veterinarians.

SB 596, by Shelley (referred to Committee on Business and Professions), companion bill to AB 1110.

* * *

Chiropractic (five bills).

AB 1831, by Clayton A. Dills (referred to Committee on Public Health), permits chiropractors to treat injured employees under Workmen's Compensation Act.

AB 1832, by Clayton A. Dills (referred to Committee on Public Health), relating to graduate physicians. Permits chiropractors to take graduate course of 600 hours and receive degree of graduate physician and use title of "physician."

See also AB 1830, 1833 and 1841.

* * *

Dentistry (seven bills).

AB 1465, by Debs, Howser and Wollenberg (referred to

Committee on Public Health), relating to disciplinary powers of State Board of Dental Examiners.

AB 1466, by Debs, Howser and Wollenberg (referred to Committee on Public Health), relating to appointments to Board of Dental Examiners. Governor shall make appointments from list of four names for each vacancy, submitted by secretaries of California State Dental Association and Southern California State Dental Association.

AB 1467, by Debs, Howser and Wollenberg (referred to Committee on Public Health), relating to temporary licenses to practice Dentistry.

AB 1468, by Debs, Howser and Wollenberg (referred to Committee on Public Health), relating to the oath on an affidavit of a complainant on an accusation.

AB 1469, by Debs, Howser and Wollenberg (referred to Committee on Public Health), advertising or solicitation to furnish dental treatment by mail shall constitute unprofessional conduct.

AB 1575, by O'Day (referred to Committee on Public Health), relating to disciplinary proceedings in connection with "chain store" offices.

AB 1576, by O'Day (referred to Committee on Public Health), person conducting dental office in his or her name shall be personally present in such office operating as a dentist or personally overseeing such operations, during a majority of the time said office or offices are being operated.

Above bills are sponsored by the California State Dental Association and the Southern California State Dental Association.

* * *

Disability Insurance (one bill).

SB 879, by Shelley (referred to Committee on Welfare and Institutions), amending the Unemployment Insurance Act to establish a system of Disability Unemployment Insurance.

* * *

Drugs and Foods (four bills).

AB 667, by Potter (referred to Committee on Public Health), relating to the adulteration, misbranding, advertising and sale of drugs and devices, and to the powers of the State Department of Public Health in relation thereto.

AB 970, by Hawkins (referred to Committee on Public Health), relating to the adulteration of drugs and devices.

AB 1824, by Lyon (referred to Committee on Public Health), relating to adulteration or misbranding or false advertising of foods.

SB 423, by Burns (referred to Committee on Public Health and Safety), relating to adultering, mislabeling, misbranding, false advertising and sale of foods, and the powers of the State Department of Public Health in relation thereto.

* * *

Drugless Practitioners (one bill).

AB 573, by Desmond (referred to Committee on Public Health), removes drugless practitioners from supervision of Board of Medical Examiners.

* * *

Handicapped Children (six bills).

AB 91, by Thomas (referred to Committee on Education), relating to the establishment of a residential school for the hard of hearing children of school age, and making an appropriation therefor.

AB 257, by Gannon, Kellems, Massion, Doyle, Ralph C. Dills, Clayton A. Dills, Kraft, Debs, Dunn, Burkhalter, Brady, Lowrey, Price, Thurman, Brown, Haggerty and Wollenberg (referred to Committee on Social Welfare), relating to children with an impaired sense of hearing and making an appropriation of $26,500.

AB 665, by Potter (referred to Committee on Public Health), relating to services for physically handicapped children, providing for receipt and administration of Federal Funds, providing for coöperation with the Federal Government.

AB 1557, by Potter (referred to Committee on Social Welfare), appropriating $100,000 to the State Department of Public Health for services to physically handicapped children.

AB 1717, by Robertson (referred to Committee on Social Welfare), an act to provide facilities to discover children with impaired sense of hearing and making an appropriation of $26,500 therefor.

SB 451, by Burns (referred to Committee on Public Health and Safety), companion bill to AB 665.

Health Insurance (two bills).

AB 1079, by Hawkins (referred to Committee on Finance and Insurance), amending Unemployment Insurance Act to include a system of health insurance within the system of unemployment insurance. This act to be known as the Social Insurance Act.

SB 885, by Swan (referred to Committee on Welfare and Institutions), companion bill to AB 1079.

* * *

Hospitals (fourteen bills).

AB 152, by Johnson (referred to Committee on Universities and Colleges), appropriating $2,000,000 for the erection and equipment of a hospital to be maintained and supported in conjunction with the medical school of the University of California.

AB 227, by Debs and Potter (referred to Committee on Judiciary), relating to the liability of innkeepers, to include hospitals.

AB 228, by Debs and Potter (referred to Committee on Judiciary), relating to personal property left in hotel, etc., to include hospitals.

AB 325, by Potter and John C. Lyons (referred to Committee on Public Health), relating to the disposition of assets of nonprofit corporations upon dissolution or winding up.

AB 327, by Potter and Kraft (referred to Committee on Public Health), relating to applicability of clinic and dispensary licensing provisions.

AB 328, by Potter and Kraft (referred to Committee on Judiciary), hospital lien bill. Providing for liens in favor of private hospitals in this State upon all causes of action for damages accruing to an injured person therein or to the legal representatives of such person for the reasonable charges for hospital care, treatment and maintenance necessitated by the injuries giving rise to such causes of action.

AB 329, by Potter and Hollibaugh (referred to Committee on Public Health), relating to indigent aid, including contracts for care of indigents, emergency services authorized; nonemergency services authorized; hospitals with which agreements may be made.

AB 330, by Potter and Haggerty (referred to Committee on Judiciary), relating to exemptions from restrictions on devises or bequests.

AB 530, by Gaffney, Berry, Brady, Haggerty and George D. Collins (referred to Committee on Governmental Efficiency and Economy), relating to the management of hospitals for which charges are demanded, collected or received by an employer.

AB 965, by Dunn (referred to Committee on Labor and Capital), relating to the furnishing of hospital services by employers to employees and former employees.

AB 1334, by Kraft, Debs, Stream and Potter (referred to Committee on Finance and Insurance), amending the Unemployment Insurance Act relating to exemptions.

AB 1618, by Howser (referred to Committee on Social Welfare), relating to payment by a responsible county or county of residence for hospital care rendered to an indigent person by another county.

ACA 17, by Potter and 66 other Assemblymen (referred to Committee on Constitutional Amendments), Legislature may exempt from taxation property owned and used for charitable purposes.

SB 499, by DeLap (referred to Committee on Welfare and Institutions), relating to county contracts for hospital care and services.

SB 1026, by Ward (referred to Committee on Welfare and Institutions), companion bill to AB 1334.

AB 227, 228, 325, 327, 328, 329, 330, 1334, ACA 17, and SB 1026 are sponsored by the Association of California Hospitals.

Hospital Service (two bills).

AB 1014, by Maloney, Miller and Haggerty (referred to Committee on Finance and Insurance), relating to medical and hospital reimbursement benefits.

AB 1015, by Maloney, Miller and Haggerty (referred to Committee on Finance and Insurance), amending the Insurance Code relating to "hospital services."

* * *

Licenses (one bill).

AB 1627, by Dickey (referred to Committee on Governmental Efficiency and Economy), relating to renewal of licenses of persons who have served in the armed forces, by boards or commissions of the Department of Professional and Vocational Standards.

Massage (one bill).

AB 528, by McMillan and Middough (referred to Committee on Public Health), establishing a California State Board of Massage.

Medical Examiners, Board of (six bills).

AB 1171, by Potter (referred to Committee on Public Health), relating to issuing of certificates, providing for committees to examine applicants and board may vote by mail.

AB 1172, by Potter (referred to Committee on Public Health), relating to disciplinary procedure.

AB 1173, by Potter (referred to Committee on Public Health), relating to immunity of witnesses in disciplinary proceedings.

AB 1174, by Potter (referred to Committee on Public Health), relating to reinstatement of certificates to practice medicine.

AB 1175, by Potter (referred to Committee on Public Health), relating to the proof of the completion of instruction and training requirements to practice medicine.

Above bills are sponsored by the Board of Medical Examiners.

SB 589, by Tenney (referred to Committee on Business and Professions), establishing subversive activities as cause for denial, suspension or revocation of licenses to practice medicine.

* * *

Mentally Irresponsible (thirty-seven bills).

AB 383, 423, 430, 447, 448, 466, 594, 595, 596, 886, 1041, 1116, 1144, 1181, 1182, 1184, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1340, 1341, 1342, 1343, 1344 and SB 105, 205, 515. All refer to this subject. They are by various authors and have been referred to various committees.

Narcotics (three bills).

AB 928, by Potter (referred to Committee on Public Health), amending Health and Safety Code relating to definitions.

AB 929, by Potter (referred to Committee on Motor Vehicles), adds vehicles operated by inspectors of Division of Narcotic Enforcement to list of "authorized emergency vehicles."

AB 1180, by Middough and Potter (referred to Committee on Governmental Efficiency and Economy), relating to the cost and care of narcotic addicts.

* * *

Nursing (five bills).

AB 326, by Potter and John C. Lyons (referred to Committee on Public Health), relating to emergency nursing services.

AB 853, by Thorp (referred to Committee on Public Health), relating to nursing service by practical nurses until the termination of hostilities.

AB 1100, by Rosenthal, by request (referred to Committee on Public Health), relating to nurses and nursing schools.

AB 1833, by Clayton A. Dills (referred to Committee on Public Health), would permit chiropractic schools to issue diplomas and certificates to "graduate nurses."

SB 909, by Donnelly (referred to Committee on Business and Professions), relating to nursing schools.

* * *

Optometry (one bill).

AB 951, by Dunn (referred to Committee on Revenue and Taxation), exempts ophthalmic lenses sold by optometrists from sales tax.

Osteopathy (one bill).

AB 6, by Burkhalter (referred to Committee on Governmental Efficiency and Economy), relating to license fees of the Board of Osteopathic Examiners.

* * *

Pharmacy (nine bills).

AB 945, by Kraft, Massion, Debs and Potter (referred to Committee on Public Health), relating to temporary licenses to practice pharmacy.

AB 1335, by Kraft, Massion and Debs (referred to Committee on Public Health), regulating the sale and use of poisons.

AB 1336, by Kraft, Massion and Debs (referred to Committee on Public Health), use of alcoholic beverages while on duty constitutes a ground for revocation of certificate.

AB 1337, by Kraft, Massion and Debs (referred to Committee on Public Health), relating to time spent attending school or college of pharmacy.

AB 1338, by Kraft (referred to Committee on Public Health), repeals sections of Business and Professions Code relating to pharmacy.

AB 1455, by Kraft (referred to Committee on Public Health), relating to fees for permits to conduct pharmacies.

AB 1620, by Kraft and Potter (referred to Committee on Public Health), relating to membership of California State Board of Pharmacy.

AB 1787, by Kraft (referred to Committee on Public Health), relating to licentiates in pharmacy.

SB 452, by Engle and Mixter (passed Senate and Assembly and signed by the Governor), permits pharmacy trainees under 21 years of age to take State license examinations before being inducted into the armed services. Emergency measure.

* * *

Physical Therapy (one bill).

AB 664, by Potter (referred to Committee on Public Health), relating to the practice of physical therapy, schools of physical therapy and the registration of physical therapy technicians.

Sponsored by the California Chapter, the American Physiotherapy Association.

Premarital and Prenatal Examinations (four bills).

AB 829, by Potter (referred to Committee on Judiciary), relating to premarital examination certificates provided by other states and by the United States Army or Navy.

AB 1830, by Clayton A. Dills and Gannon (referred to Committee on Public Health), permits chiropractors to make prenatal tests for syphilis.

AB 1841, by Clayton A. Dills and Gannon (referred to Committee on Public Health), permits chiropractors to issue premarital test certificates.

SB 547, by Burns (referred to Committee on Public Health and Safety), companion bill to AB 829.

Public Health, Dept. of (two bills).

AB 686, by Lyon (referred to Committee on Civil Service and State Departments), relating to terms of board members. Places director under Civil Service laws.

AB 803, by Wollenberg and T. Fenton Knight (referred to Committee on Civil Service and State Departments), sets director's salary at $10,000 per annum.

* * *

Sales Tax (four bills).

AB 11, by Doyle and others (referred to Committee on Revenue and Taxation), exempts medicines dispensed by a registered pharmacist in accordance with the prescription of a medical practitioner.

AB 44, by Massion and others (referred to Committee on Revenue and Taxation), exempts medicines and drugs.

AB 80, by Rosenthal, Bennett and Kilpatrick (referred to Committee on Revenue and Taxation), exempts medicines dispensed by a registered pharmacist in accordance with the prescription of a medical practitioner.

AB 129, by Niehouse and Kraft (referred to Committee on Revenue and Taxation), exempts medicines and drugs.

* * *

State Guard (three bills).

Three bills have been introduced which rewrite the State Guard Act. These are AB 61, by Charles W. Lyon, and SB 1070 and 1071, by Tenney.

* * *

Veterinary Medicine (three bills).

AB 233, by Stream, Lowrey and Burns (referred to Committee on Universities and Colleges), appropriating $500,000 for establishing, equipping and maintaining a College of Veterinary Medicine as a unit of the University of California.

AB 696, by Dilworth (referred to Committee on Agriculture), relating to emergency veterinarians.

AB 1602, by Stream and Burns (referred to Committee on Universities and Colleges), relating to a College of Veterinary Medicine in the University of California.

* * *

Vital Statistics (one bill).

AB 1782, by Robertson (referred to Committee on Judiciary), establishing a uniform vital statistics act.

Workmen's Compensation (seven bills).

AB 292, by Gaffney, Berry, Haggerty, George D. Collins, John C. Lyons and Dunn (referred to Committee on Finance and Insurance), relating to percentage contracts and rebates for medical or surgical care or hospitalization.

AB 418, by Rosenthal (referred to Committee on Finance and Insurance), relating to workmen's compensation, including compensation for hernia, heart trouble and pneumonia.

AB 506, by O'Day (referred to Committee on Finance and Insurance), relating to benefits.

AB 1658, by Dickey (referred to Committee on Finance and Insurance), relating to pneumonoconiosis and silicosis.

SB 408, by Tenney (referred to Committee on Financial Institutions), relating to hernia, pneumonia and heart trouble.

SB 788, by Mixter (referred to Committee on Labor), relating to sums paid for medical, surgical and hospital treatment.

SB 792, by Mixter (referred to Committee on Labor), relating to injuries.

* * *

Miscellaneous (twenty-three bills).

AB 230, by Kilpatrick (referred to Committee on Public Health), authorizing payment of doctor's fees for doctor's food certificates by a city, city and county or county.

AB 515, by Carlson and Carey (referred to Committee on Universities and Colleges), appropriating $87,000 to establish and maintain a School of Public Health in the University of California.

AB 916, by John B. Knight (referred to Committee on Public Health), relating to liability for communicable disease care.

AB 946, by Gaffney, George D. Collins, Miller and Haggerty (referred to Committee on Civil Service and State Departments), an act relating to full-time civil service employees of this State and of any local governmental agency thereof, and restricting the activities of such persons with regard to the practice of any profession or business requiring a license issued under any statute of this State.

AB 1077, by King, Thompson, Crichton and Robertson (referred to Committee on Education), relating to the establishment and maintenance of student health services at State colleges.

AB 1268, by Desmond (referred to Committee on Ways and Means), relating to State aid to cities and counties for the treatment of persons suffering from tuberculosis.

AB 1287, by McMillan and Beck (referred to Committee on Education), relating to supervision of the health of pupils in the public schools.

AB 1553, by Call (referred to Committee on Public Health), medical inspection of food handlers.

AB 1628, by Dickey (referred to Committee on Judiciary), relating to fees and expenses of witnesses under Business and Professions Code.

AB 1659, by Massion (referred to Committee on Public Health), relating to licensing of sellers of prophylactics.

AB 1729, by Debs (referred to Committee on Judiciary), relating to physician examining person accused of intoxication.

AB 1917, by Johnson (referred to Committee on Judiciary), relating to review of decisions of administrative boards.

AB 1920, 1921, 1922, by Johnson (referred to Committee on Judiciary), relating to survival of personal injury actions.

AB 1927, by Johnson (referred to Committee on Judiciary), relating to actions for wrongful injury and death.

SB 145, by Mixter (referred to Committee on Finance), making an appropriation to the California Polytechnic School for the cultivation of herbs.

SB 282, by Tenney (referred to Committee on Transportation), relating to ambulances. Companion bill to AB 513.

SB 374, by Salsman (referred to Committee on Public Health and Safety), relating to contracts for local health administration.

SB 548, by Hatfield, by request (referred to Committee on Education), relating to medical and hospital service for pupils of the public schools.

SB 609, by Hatfield (referred to Committee on Public Health and Safety), relating to the expenditure of funds of tuberculosis wards and hospitals.

SB 1051, by Ward (referred to Committee on Public Health and Safety), making an appropriation for the education of the public concerning cancer and for the control thereof.

SJR 12, by Biggar, Gordon, Slater, and Carter, memorializing the President of the United States, the members of Congress from California and the Surgeon Generals of the United States Army and Navy, to institute investigations concerning the advantages that would accrue to the patients, if one or more military hospitals of convalescent or other nature were erected in mineral springs areas located in California. Passed by both the Senate and the Assembly.

California's Mineral Springs Resources as Available Sites for Military Hospitals

By unanimous vote of the California State Senate and Assembly, a joint resolution was adopted without debate by both houses, in the form of a memorial to the Federal Authorities urging consideration of one or more mineral spring areas located in California, as possible sites for military hospitals.

In the Senate, the joint resolution was sponsored by Senators George M. Biggar of Covelo, Frank L. Gordon of Suisun, Herbert W. Slater of Santa Rosa and Oliver J. Carter of Redding.

In the Assembly, Assemblyman Ernest C. Crowley of Fairfield was the sponsor.

Copy of the resolution follows:*

(COPY)

Senate Joint Resolution No. 12

INTRODUCED BY SENATORS BIGGAR, GORDON, SLATER, AND CARTER

January 28, 1943

WITHOUT REFERENCE TO COMMITTEE

Senate Joint Resolution No. 12—Relative to memorializing the President of the United States, the members of Congress from California and the Surgeon Generals of United States Army and Navy, to institute investigations concerning the advantages that would accrue to the patients, if one or more military hospitals of convalescent or other nature were erected in mineral spring areas located in California; with special reference to the treatment of invalid soldiers and sailors suffering from shock or nervous or other disorders and for whom mineral spring and spa procedures offer special advantages in recovery of health and rehabilitation for useful life.

WHEREAS, California possesses more than 400 mineral springs, the healing values of some of which have proven through many years of use and trial; and

WHEREAS, In European countries, and in the United States at Saratoga Hot Springs in New York and at Hot Springs National Park in Arkansas, mineral spring or so-called spa treatment has been abundantly tested and shown to be of decided worth in restoring to health and useful living, thousands of persons who were sufferers from certain nervous and chronic diseases; and

WHEREAS, World War II has already brought its toll of various injuries and diseases to many American soldiers and sailors; and

WHEREAS, Many of these invalided soldiers and sailors are now being and in the future will be brought back to our Country in order to promote their better convalescence and recovery; and

WHEREAS, Soldiers and sailors suffering from shock and other nervous disorders and chronic diseases would probably have their convalescence and recovery expedited, with more certain restoration to health and return to

* For editorial comment, see page 105.

useful military or civilian activities, if proper mineral spring treatment was available; and

WHEREAS, The mineral springs of California, in connection with beneficent climate and surroundings, offer exceptional opportunities for the placement of hospital structures, equipped with facilities for proper physiotherapeutic apparatus, pools, mud and thermal baths, and regimens of supervision; and

WHEREAS, The invalided soldiers and sailors whom such methods of treatment could especially benefit should not have these facilities denied to them; therefore, be it

Resolved by the Senate and Assembly of the State of California, jointly, That the President and the Congress of the United States and the Surgeon Generals of the United States Army and United States Navy be memorialized to institute measures that would make for acquirement of one or more mineral spring areas located in the State of California, on which appropriate spa structures with equipment and surroundings could be brought into being by the Government at an early date; in order to promote through such measures the more efficient care of a large number of invalided soldiers and sailors, and to the end that thereby their convalescence, health and rehabilitation would be more certainly promoted and their return to useful military or civilian life more definitely assured; and be it further

Resolved, That a copy of this resolution be sent to the President and Vice-President of the United States, and to the Surgeon Generals of the United States Army and United States Navy, and to the Speaker of the House of Representatives of the Congress of the United States, and to each Senator and member of the House of Representatives from California in the Congress of the United States, and that the Senators and Representatives from California are hereby respectfully requested to urge such action.

COMMITTEE ON MEDICAL ECONOMICS

New Order Governing Wages Paid and Hours Worked In California by Women and Minors

With Special Relation to Employees in Professional Offices

After holding public hearings and protracted discussions the Industrial Welfare Commission of the State of California has adopted a new wage and hour order covering "professional, technical, clerical and similar occupations." This order applies to all female and minor employees in the offices or laboratories of physicians.

Every doctor should acquaint himself with the basic provisions of this order and should immediately adjust any conditions in his own office which do not comply with the minimum provisions of the order. Failure to do so will leave the doctor liable for possible prosecution by the Industrial Welfare Commission, involving a $50 minimum fine and a 30-days' minimum jail sentence.

In connection with the provisions of the new wage and hour order, the basic provisions of the California Industrial Welfare Law should be borne in mind. In brief, these provisions are:

No female or minor employee shall be allowed to work for more than eight hours in one day, nor more than 48 hours in one week, nor more than six days in one week, nor before the hour of 6 a.m. nor after the hour of 10 p.m.

Issuance of the new wage and hour order means that specific provisions have been made for female and minor employees in professional offices, among others, in conformity with the basic provisions of the State law. These provisions as they relate to doctors' offices may be summarized as follows:

Definitions: (1) "Employee" means any woman or minor engaged or permitted to work, including students in technical, vocational or other schools who perform services for the public for which a fee is charged by the school. (Ed.—For instance, students in medical secretarial training schools who work in physicians' offices as a part of their training and who are paid any salary or for whom the physician pays any fee to the school.)

(2) "Hours employed" includes all time during which an employee is required to be on the employer's premises ready to work, or to be on duty, or to be present at a prescribed work place . . . whether or not required to do so.

(3) "Learner" is an employee who has not yet completed 480 hours of employment in the particular field of work, whether that experience has been gained in the office in which the learner is then employed or in a similar office elsewhere.

Maximum Hours: These regulations are in conformity with the basic law. They provide that no female or minor employee shall work more than 8 hours in one day, nor more than 48 hours in one week, nor more than 6 days in one week, nor before the hour of 6 a.m., nor after the hour of 10 p.m.

Minimum Wages: The new order prescribes a minimum wage of $18 a week (or $78 a month) for a 40-hour work week. Hours worked in excess of 40 hours weekly shall be compensated at a rate of not less than 45 cents an hour. For a work week of less than 40 hours, the minimum wage shall be at the rate of not less than 50 cents an hour, but not more than $18 a week, the basic wage. The table below shows the minimum wages payable for work weeks of varying lengths:

Hours per week	*Minimum weekly wage*	*Minimum monthly wage*
20	$10.00	$43.33
22	11.00	47.67
24	12.00	52.00
26	13.00	56.33
28	14.00	60.67
30	15.00	65.00
32	16.00	69.33
34	17.00	73.67
36 to 39	18.00	78.00
40	18.00	78.00
41	18.45	79.95
42	18.90	81.90
43	19.35	83.85
44	19.80	85.80
45	20.25	87.75
46	20.70	89.70
47	21.15	91.65
48	21.60	93.60

Above 48—employment is prohibited under Industrial Welfare Commission Order No. 4 N.S. (except in an emergency; a female over 18 can work 54 hours. If emergency work beyond 48 hours a week is done, the minimum pay must be the rate for 48 hours plus 75 cents an hour additional for all time up to 54 hours.)

Laundry, Uniforms, Etc.: No deduction is to be made from wages for the purchase or laundering of uniforms; the employee may not be required to purchase or launder uniforms at his or her own expense as a condition of employment.

Straight Employment: No employee may be required to work more than 5 hours straight unless the period is broken up with a meal period of not less than 30 minutes, during which period the employee shall not be liable for the performance of any duties.

Records: Each employer shall keep a record on each employee, to show the following items: name in full; home address; Social Security number; date of birth, if under 18 years of age; occupation; established day of rest; "learners" shall be designated with the letter "L," male minors under 18 years of age with the letter "M" and female minors under the age of 18 years with the letter "F"; hours employed, showing starting and quitting time for each day worked; total wages paid and total hours worked in each payroll period. Hours employed and wages paid for each period shall appear on the same record. All records must be kept for at least one year and must be kept available for inspection by duly authorized representatives of the Industrial Welfare Commission.

A survey made by the California Medical Association in August, 1942, indicated that the maximum hour and minimum wage provisions of the new Industrial Welfare

Commission order are already being lived up to or exceeded by the large majority of physicians throughout California. However, changed conditions since last August may have brought some professional offices out of line with these provisions; also, there are some physicians' offices where the basic and specific provisions of the law have not been observed in the past. It is incumbent on all physicians to follow these wage and hour provisions to the letter in order to avoid difficulties with the Industrial Welfare Commission.

ASK YOURSELF THESE QUESTIONS:

(1) Are the employees in my office working longer than 8 hours in one day, or more than 48 hours in one week?

(2) Am I paying the minimum wages of the new order? (There is no ceiling on wages in this order, merely a minimum.)

(3) Am I supplying uniforms and paying for their laundering?

(4) Are my employees required to work more than 5 hours straight without a 30-minute meal period, free from all work?

Your answers to these questions will indicate whether or not you are complying with the law. If you want further information on any specific point in the law or in the new wage-and-hour order, write to the C.M.A. office, 450 Sutter, San Francisco.

COMMITTEE ON ASSOCIATED SOCIETIES AND TECHNICAL GROUPS

Nurses Urge Hospital Pay Increases Immediately

Hope that California hospitals will put into immediate effect pay increases long sought by the nursing profession and now authorized by the War Labor Board was expressed today by the California State Nurses' Association. Such action is vital to the public health, the nursing profession emphasized.

"The salary standards for which members of the Association of California Hospitals have sought authority are actually very low, starting at only $140 a month, without maintenance, for a graduate nurse," declared Miss Shirley C. Titus, executive secretary of the California State Nurses' Association.

"In many cases this represents only a 3 per cent increase over the salaries of past years, and is substantially below the 15 per cent pay increase recognized in the 'little steel' formula as meeting the increased cost of living.

"It is too early to state whether the hospital staff nurses of California, considerably disturbed over the long delay in adjustments of their traditionally low salaries, will consider that the $140 minimum is adequate to cover their rising costs of living, or whether this sum will be sufficient to attract new nurses to fill the profession's depleted ranks.

"It should be pointed out that the salary standards, starting at $140, were approved by organized nursing many months ago, before living costs reached their present peak, and that the nursing profession's views on salary standards have subsequently changed.

"However, if the $140 minimum pay is immediately made effective in all hospitals of California, it will serve to standardize the pay of the profession on a State-wide basis for the first time and will be at least a start toward eliminating the grave inequalities which exist in some sections of the State.

"Adequate pay for nurses is a vital public health measure since it would serve to attract new nurses to the profession and would help keep the present ranks of nurses from further reduction through competition from higher-paying occupations. Stabilization of nursing staffs for the protection of civilians is urgent in view of the hundreds of nurses who are going to war.

"The main questions before us now are whether adjustments will be adequate, whether they will be immediate and whether they will apply to all hospitals of the State."—California State Nurses' Association: 609 Sutter Street, San Francisco; 1052 West 6th Street, Los Angeles.

Nurses Swamped by Demands from Army, Navy and Civilians

Place of the nurse in today's war world is something that even the nurse herself doesn't know. Torn between military and civilian demands, the women in white are spreading themselves thin in an effort to be all things to all people. . . .

Miss Shirley Titus is executive secretary both for the California Nursing Council for War Service and the California State Nurses' Association, and she, too, is in a quandary. On the one hand are needs of the military for more nurses at once for service at the front lines. On the other hand are vital needs of hospitals here in the target area.

Staffs Reduced

"The Army and the Civilian Defense Council will just have to get together," said Miss Titus, pinchhitting today for Major Stimson. "Hospitals have never been so full. People have enough money now to pay for hospital and surgical care, and it seems to me everybody in the world is having a baby. Hospitals with a normal staff of 150 nurses are operating with 75." . . .

Hospitals are finally realizing that they must raise nurses' salaries in order to attract competent women. Miss Titus said. Only yesterday did the Association of California Hospitals announce that 90 per cent of its membership is prepared to meet the schedule of minimum salaries and personnel practices for institutional nurses, set up in October by the California State Nurses' Association.

This schedule calls for a $140 minimum entrance salary without maintenance, and increase in pay of general staff nurses at $2.50 a month up to $155 a month after completion of 36 months' service. Under maintenance, it is stipulated that the nurse shall not be required to take more than one meal a day in the hospital dining room, and not more than $10 shall be deducted from her pay check for meals.

Vacation With Pay

Under personnel practices, the nurse should have two weeks' annual vacation with pay, and 14 days a year sick leave with pay after the first year. Under time schedule, she should have a whole day off each week, recognition of six holidays a year, or a day off in lieu thereof. Other practices have been included in the schedule to give the nurse an "even break" with women in other employment.

Nurses' Aides are doing "a wonderful work—I just can't say too much in praise of them," Miss Titus reports. "I don't know what we'd do without them. They are efficient and faithful—the best help you can imagine." . . .—San Francisco *News*, December 18.

War Nursing

On the Military Front

Approximately 20,000 registered nurses are serving

with our troops in camps over here and abroad. At the same time a substantial reservoir of nurses is being built up by the American Red Cross Nursing Service. It will provide the thousands more the Army and Navy will require as their man-power approaches the ten-million mark.

Two thousand two hundred sixty-two (2,262) young unmarried nurses enrolled in the First Reserve of the ARCNS in October, a gain of 144 over September enrollments. (A recent regulation of the War Department makes married nurses, under 40 and having no uncared-for dependents, eligible for military service).

Overseas

The number of American nurses serving beyond our coasts is a military secret. It grows as our armed strength in the four corners of the world increases. Reports have filtered through of their presence in: Africa, Alaska, Australia, China, England, Greenland, Hawaii, Iceland, India, Ireland, Jamaica, New Caledonia, Newfoundland, New Guinea, New Zealand, Panama, Puerto Rico, and Trinidad.

In Continental U.S.A.

Army and Navy nurses are serving in more than 300 hospitals dotting the length and breadth of the Union. They are stationed at forts, camps, barracks and navy yards. They are also in ordnance departments, quartermasters' depots and disciplinary barracks. They are stationed at proving grounds, gunnery schools, air bases and flying schools.

Fifteen hundred (1,500) Army nurses have also been assigned to air evacuation units organized for the aerial transportation of sick and wounded from theatres of war. Assigned to station hospitals at Army air fields, these nurses are given flying experience in transport planes which accommodate forty patients and are equipped with facilities for surgery, blood transfusions and other emergent treatment.

On the Civilian Front

Nursing "as usual" is out. Adjustments are the order of the day.

Essential services—the care of the sick in hospitals and home, prevention of disease and of disabling conditions, and education for healthful living—are carried forward. But the services of nurses on hospital and public health nursing staffs are supplemented to a larger extent than ever before by nurses serving on a part time basis; by student nurses; by volunteer nurse's aides; and by paid auxiliary workers.

Heavier loads are carried by nurses all along the civilian front.

Reasons:

More patients seek care in hospitals each year.

Doctors are scarcer. Thousands are in military service.

Nursing ranks are thinning as more and more respond to the call to the colors.

High turn-over on nursing staffs calls for more carefully planned staff-orientation programs.

The greater use of auxiliary workers in the care of the sick calls for more constant and careful supervision on the part of registered nurses.

War pressures resulting in industrial speed-ups, stricter food and fuel rationing, inadequate home care of children, mental and nervous strains, all call for sharp expansion in public health nursing programs.

Dislocated populations, the boom-towns around industrial plants and military camps and the Japanese-Americans evacuated from target areas to relocation centers in the West and Middle-west, call for more nursing services than can readily be provided by local nurses.

One-time spare time is filled with such extra activities as teaching classes in home nursing or first aid; teaching refresher courses to graduate nurses; staffing Red Cross casualty centers; developing civilian defense nursing corps; and participating in the programs of local or state nursing councils for war service which have been organized in every state.

Closely associated with the sub-committee and the Council is:

The United States Public Health Service

Administratively responsible, through its States Relations Division, for the $3,500,000 appropriated by Congress for nursing education for the school year, 1942-'43.

Women In War

Marian Randall, head of the Nation's Civilian Defense nurses for O.C.D. for the past year, finds California's women in white are "doing a magnificent job."

The distinguished public health nurse, whose official title is Chief Nurse, Medical Division, Office of Civilian Defense, was in San Francisco during the week of January 25th, from Washington, D. C., looking over the preparations made for nursing care in case of enemy attack. This was her first trip of inspection to the West Coast.

"Working for something you pray will not happen is a hard thing to do," commented Miss Randall. "However, I cannot emphasize too strongly the importance of the participation of every available nurse in civilian defense. Despite the thinning ranks of the nurses, brought about by the demands of the armed services, and increased civilian needs under the difficult conditions of wartime, the California nursing profession is doing an admirable job."

Conferring with Miss Randall this week were representatives of the State's Emergency Medical Service which functions under the State Council of Defense. Nurses of the Emergency Medical Service are ready in time of disaster to serve in hospitals, to man casualty stations, base hospitals and take care of patients in their homes, should hospital space be unavailable.

According to Miss Ruth McCullagh, nurse deputy for California, more than 6,000 nurses are signed up with the State's Emergency Medical Service.

Units are organized in counties and cities throughout the State with a nurse deputy working closely with the medical chief in each locality. The nurse deputy keeps a file of all nurses who will respond for duty either in their own communities or who will be able to go to other districts where they may be needed for disaster service.

"Even if the bombs never fall—and we hope they never do—" says Miss Randall, "the nursing profession is benefiting greatly from civilian defense activities. Nurses are brushing up on their first aid courses. They are being given opportunity to learn the newest scientific developments, which the war is hastening, such as administration of blood plasma, and the newest treatments for burns and for accident cases.

"The use of our nurses in the recent tragic Boston fire is an example of how valuable our new training has become. Then, too, we are learning to know each other better and how to work together as never before."

Conferences were held by Miss Randall with Mrs. Mildred Byers, nurse consultant for the Ninth Region of O.C.D.; Miss McCullagh of State Emergency Medical Service; Mrs. Christie Thompson, nurse deputy for Nevada; Mrs. Minnie Benson, nurse deputy for Arizona, and nurse deputies for a number of key California counties and cities.

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

Brochure on Nutrition: By San Bernardino County Medical Society

The Nutrition Committees of the San Bernardino County Defense Council and the San Bernardino County Medical Society recently brought off the press a neat 3 by 5 brochure of 6 pages, text of which is presented below:

Lesson 1.

STAGES OF HEALTH

1st Stage—Buoyant health, with energy and zest for living.

2nd Stage—The so-called normal state. Able to earn living.

3rd Stage—Sick in bed.

Comments: Most of us find ourselves in the second stage of health, one step above sickness in bed, one step below buoyant health—all determined largely by the wisdom used in our food selections.

* * *

Lesson 2.

VITAMINS A, B, AND C

Vitamin A—Supplied mostly by the green and yellow vegetables and fruit, and by butter and liver.

Vitamin B Complex—This includes B_1, B_2, and niacin. Supplied by all natural foods. Important sources are ham (not bacon), lean pork, other lean meats, milk, eggs, whole grain foods, legumes.

Vitamin C—Most plentiful in oranges, grapefruit and tomatoes.

Note: For adequate reserve supply in your tissues, plan your meals each day to include foods that supply these vitamins.

* * *

Lesson 3.

PROTEINS—ANIMAL AND VEGETABLE

The Proteins are the *building blocks* of the body. Those proteins of animal origin—from milk, cheese, eggs and meat—are more complete and contain better building materials than the proteins derived from the grains, vegetables and fruits.

Therefore each adult and child needs *every day* the following foods: milk*, buttermilk, or cheese; and meat, fish, or fowl; and one egg, to supply the protein requirements.

* One pint for the adult; one quart for the child, one quart or more for the adolescent.

* * *

Lesson 4.

CALCIUM AND ITS REQUIREMENTS

Calcium is a mineral, and like iron must be considered in planning for a good diet. It is needed for the nerves, the heart, intestines, and other soft tissues, as well as for the bones and teeth.

If milk, cheese, or buttermilk is not taken daily, a calcium deficiency may result.

* * *

Lesson 5.

UNWHOLESOME FOODS—*Classification*

Foods made from sugar:
Candy, carbonated beverages,
Synthetic syrups.

Foods made from "refined" unenriched white flour: Unenriched bread, waffles, hot cakes, doughnuts, cookies, pies, cake. NOTE: These foods are considered unwholesome because vitamins, etc., were removed when the wheat and the sugar plants went through the refining processes.

Begin *now* using enriched or 100 per cent whole wheat bread, and for dessert demand fruit*, nature's packages of vitamins and energy.

*May use dried, canned, or fresh fruits. They give *energy* plus vitamins, minerals and sugars.

* * *

Lesson 6.

VALUABLE FOODS—*Inexpensive*

Potatoes—White or Yellow.

Dried Beans and Peas. Peanut Butter.

100 per cent *Whole Wheat* Bread or *Enriched* Bread.

Whole Grain or *Enriched* Cereals.

Wheat Germ Middlings (Also called "scalp of the sizings"). This is a cereal for cooking, and is richer in vitamins than the whole grain, but not as rich as pure wheat germ.

Wheat Germ. At breakfast and lunch, or dinner, add one tablespoonful of wheat germ to milk or other food.

Buttermilk, Cheese, Whole Milk.

Cheaper Cuts of Meats, Lean pork, *Liver* of beef and lamb.

Fruit for dessert as a routine.

102,500 Die in Accidents in U. S. in '41

Chicago.—Accidents throughout the United States in 1941 killed 102,500 persons and permanently disabled another 350,000, the National Safety Council's statistical year-book revealed.

This compares with total United States casualties in World War I of 364,800.

The accident toll meant the loss of 460,000,000 man-days of work or the equivalent of 1,500,000 workers, the Council reported. Cost to the nation was estimated at $4,000,000,000. The council's safety engineers listed 97 per cent of the accidents as preventable.

Traffic accidents led other causes with a list of 40,000 dead, 1,450,000 injured and a cost of $1,900,000,000. Accidents in the home ranked next with 31,500 killed and 4,650,000 injured and a cost of $600,000,000. Other public accidents of all kinds took a toll of an additional 15,000 dead and 1,800,000 injured.

On-the-job accidents killed 18,000 workers, injured 1,600,000 and cost the country $850,000,000.

William A. Irvin, of the United States Steel Corporation, chairman of the War Production Fund to Conserve Manpower, pointed out that the staggering losses suffered by the United States through accidents are a direct threat to victory.

"We Americans have been killing ourselves at a record-breaking rate," Irvin said. "Since the beginning of the war, the Nazis have killed 43,300 English civilians in mass air raids. We more than doubled that figure in accidents alone. Accidents must be reduced for victory."

Work Grows for Physicians, Survey Shows

The patient the doctor left behind him—

This is the category into which a large portion of the American public falls today—at least on the Pacific Coast, has been again emphasized by an American Red Cross survey.

And as a result of the survey, made by Dr. Milton Rose, Pacific Area director of health service, and Miss Edith Olson, assistant director of the Red Cross Nursing Service, Red Cross nursing services have been arranged, or are being considered, for five Coast cities.

In comparison with these cities, the figures released by Miss Olson show, San Francisco, in spite of having lost more than one-third of its doctors—is a heaven of medical attention, with its visiting nurses and city health department. . . .

This followed disclosure by Dr. Harold Fletcher of the Assignment and Procurement Service here, that 568 San Francisco doctors already have been commissioned. This is out of a total of 1,745 doctors in the city, about 1,500 of whom were practicing, Dr. Chester Cooley, Secretary of the San Francisco County Medical Society, said. (Some were research physicians at the medical schools, some on staffs of military hospitals.)

This leaves about 1,000 doctors to care for the city's expanded population—from 634,535 in 1940 to 728,235 in the air raid warden census.

Said Dr. Cooley: "The doctors have been doubling up, of course. Then the County Medical Society has put in a direct wire service for any one to call, day or night. We have several doctors on call.

"Some hospitals have allowed their resident physicians to take calls in the neighborhood when people can't get doctors.

"The load has increased tremendously. Many doctors are working together so one can cover for two, giving the other a night's sleep occasionally.

Dr. Geiger summed it up like this: "No one is being neglected in San Francisco that I know of. But doctors are caring for more patients, and those in certain specialties have to do the work of other specialties.

"As a whole the citizenry is being magnificently handled by the medical profession. And so far, no epidemics are in sight, except an increase in cases of cerebro meningitis which we seem able to take care of. It's a strain, and I don't know how much more it can take. We may be able to lose a few more doctors, but darn few! And certainly no more nurses!"

Another picture of the medical status quo came in a statement today by Dr. Karl L. Schaupp of San Francisco, president-elect of the California Medical Association. California citizens are still receiving a high standard of medical care and will continue to receive it in spite of military demands for doctors, he declared.

The explanation by Dr. Schaupp, also Ninth Corps Area chairman of Procurement and Assignment Service, was backed by Dr. Fletcher, physicians state chairman of the service.

Dr. Schaupp emphasized, "So many rumors have been heard about the so-called doctor shortage it is time the citizens of California learned the facts.

"A survey just completed by the Association shows that with very few exceptions the communities of this State have enough doctors still in practice to give civilian population adequate medical care. There are some cities and some rural areas where additional doctors are needed, but the relocation of 20 doctors, at the outside, would bring the medical population up to standard in these cases. We expect to handle this relocation work in the next few months."

The survey, he said, shows only six of the 58 counties with any doctor problem and only four that really need more doctors.

"Judged by nation-wide standards," he pointed out, "California is more than adequately supplied with doctors. This does not mean that peace-time standards can be maintained. We are at war and the needs of the Army and the Navy for medical officers must be met.

"Neither does it mean that the civilian population can expect luxuries in medicine, nor that the doctors can hope to practice on pre-war schedules. The doctors are accepting their increased burden without complaint, even though it means a personal sacrifice."

Dr. Fletcher, in confirming these statements, declared "great progress has already been made" in meeting shortages near defense plants where population has increased, and promised that "it looks as though the rest of them will be taken care of . . . in the near future."

Underlining the assurance, Dr. Schaupp said, "California not only has enough doctors, but it is one of five states in the country still enjoying the luxury of a medical surplus."

Just as a final touch to the situation came the revelation at the University of California Hospital here that staff members no longer have waiters to bring them their lunch at the Faculty Club—or to clear the tables either. "Help is scarce," said F. S. Durie, hospital superintendent, "and the physicians know it is needed worse in other places than the dining room."—San Francisco *News*, January 22.

Women in Industry

Dr. H. Close Hesseltine, chairman of the obstetrics and gynecology committee of the American Medical Association, in giving his committee report to the fifth annual Congress on Industrial Health, advocates regular plant physicians, industrial hygiene services and control of unhealthful exposure. In addition, his committee recommends that:

1. Mothers should work only on day and afternoon shifts, since women generally work at home in addition to their factory jobs.

2. Maximum weight lift for women should not exceed 35 pounds—lower for older or pregnant women.

3. Women should wear slacks, comfortable low shoes and avoid dangling sleeves on blouses.

4. Women should be employed 36 to 48 hours per week, depending on the work and the individual.

5. Proper rest rooms should be provided for women, with couches for them to recline.

6. Each plant should have four women or matrons familiar with supervision of women employees.

7. Strain and too long periods of sitting or standing should be avoided.

8. Pregnant women should be kept from contact with injurious substances, including lead, mercury, arsenic, phosphorus and benzol.

9. Adequate rest periods should be provided, particularly for pregnant women.

10. Pregnant women should not be employed after six months before birth of the child, or after the 34th week of pregnancy. She should not return to work until six weeks or more after birth.

11. Adequate care should be provided for children of mothers in industry.

American Public Health Association Urges Ban on Prostitution

Suppression of prostitution is essential for control of venereal disease, two medical and health authorities declared at the opening meeting of the American Public Health Association, held on November 12, in St. Louis.

"Some persons in charge of important medical and public health activities of official agencies, civilian as well as military, are not yet convinced of the desirability of suppression of prostitution as an element of a venereal disease control program," Dr. Theodore Rosenthal of the New York City Health Department charged.

"Proper information on the value of this phase of venereal disease control is essential."

The information, in the shape of a report showing how venereal disease rates dropped among soldiers at Fort Bliss, Tex., when prostitution in the vicinity was suppressed, was furnished by Dr. Bascom Johnson, Jr., U. S. Public Health Service officer assigned to the El Paso, Tex., City-County Health Unit.

Fort Bliss, an expanding military cantonment with many thousands of troops, he explained, is located within a short distance of El Paso, which is within easy walking distance of Juarez, Mexican border city just across the Rio Grande.

"When this study was started," he stated, "commercial prostitution was flourishing both in El Paso and in Juarez. There were nine well-known houses of prostitution in El Paso under police surveillance, and in some respects, almost under police protection. The women in these houses were being examined once a week in the city police department by local health department personnel.

High Rate Disclosed

"During this period almost 75 per cent of the Army's infections was found to be coming from houses of prostitution. Fifty-seven per cent were apparently contracted in El Paso, the remaining 43 per cent was fairly evenly divided between Juarez, Mexico, and communities outside the El Paso-Juarez area. However, of 155 cases contracted in El Paso fully 84 per cent was said to be acquired in the nine houses of prostitution where the women were being examined once a week.

"There followed a period when El Paso's houses were closed but flagrant prostitution conditions remained readily accessible in Juarez, Mexico. The percentage of venereal infections coming from El Paso decreased about 25 per cent but the percentage coming from Juarez increased almost an equal amount. It was impossible to demonstrate any decrease in Army venereal rate which could be attributed to the improved conditions in El Paso.

"After war was declared, the International bridge to Juarez was closed to American soldiers on Dec. 8, 1941. It remained closed for 82 days. During this period the Army venereal rate dropped to 36. On Feb. 28, 1942, due to diplomatic pressure, the bridge was reopened to soldier traffic and the venereal rate went up again to 60. On June 19, 1942, a policy of repression of prostitution was started in Juarez. Since then the Army venereal rate has gradually declined again. The rate for July, 1942, reached an all time low of 28 cases per 1,000 men per annum."

Old Argument Refuted

Contrary to one of the standard arguments against suppression of prostitution, closure of the houses did not, so far as Dr. Johnson could find, cause any widespread dissemination of these women throughout the community. According to the statements of the prostitutes themselves, the vast majority leave town as soon as the "heat is turned on."

As the prostitutes are eliminated, the "non-prostitute pickup" or "chippie" becomes more important as a source of venereal infection, Dr. Johnson stated. An attempt is now being made in El Paso to set up a redirection program for these borderline prostitutes. Sociological studies are badly needed, Dr. Johnson declared, to help health and social workers solve the borderline prostitute problem.

COMMITTEE ON MEMBERSHIP AND ORGANIZATION

State and County Medical Societies: Some Functions and Responsibilities

The Ohio State Medical Association, in the January issue of its *Journal*, presented an outline of work and obligations facing organized medicine. Excerpts from the excellent presentation follow:

More and more frequently the question is being asked: "What is the medical profession doing to help meet the community health situation created by increased demands for medical services and decreased numbers of civilian physicians?" The obvious answer is, of course, that individual physicians are working long, hard hours and will continue as individuals to do all that is humanly possible to meet the medical needs of the people generally.

But it is to the medical profession as a group that the questions are directed and the answer must be given in terms of organized effort. In other words, the leadership must be furnished by the State Medical Association and its county medical societies, working coöperatively with other organizations representing allied professions.

The medical profession has met and will continue to meet the challenge of the government with respect to providing its share of medical officers for the armed forces. The record speaks for itself and is one of which the medical profession can be proud.

At the same time, the medical profession is confronted with a challenge from the civilian population. The people have willingly given up several thousand of their physicians for military service. They are counting on those members of the profession who are ineligible for one reason or another for military service to maintain necessary medical and health services.

The present medical and health situation in general is one which should not cause anxiety. There is sufficient medical manpower in the State to meet immediate or future problems. True, there is a question of more equitable distribution but this can and will be worked out by the State Association and the Procurement and Assignment Committee. A few areas are undermanned medically speaking but these conditions are rapidly being remedied—or will be in the near future. Facts do not substantiate certain exaggerated and alarming statements which have been made about conditions by those who have not been in possession of factual information.

Nevertheless the medical profession should not strike a smug attitude as there is work to be done and vital situations to be corrected. Each county medical society must do its part locally toward upholding the medical profession's responsibility in meeting civilian needs. Following are some suggested methods, some of which can be put into effect by each physician as an individual and some which will require organized effort on the part of the county medical society. They should be discussed at county society meetings.

Alert and Proper Organization Essential

Regular Meetings.—Matters relating to the war effort and health questions arising from the war should be discussed fully and freely at county medical society meetings. Unless the societies meet regularly this cannot be done and only a portion of the things which should be done can be accomplished. Every society should make every effort to maintain a regular meeting schedule—special meetings if necessary.

Active Officers.—No society can be on its toes unless it has active officers and committees. At this particular time the responsibility of officers is great. Each society has a right to insist that its duly elected leaders give the profession leadership in the many efforts which are necessary to properly meet wartime problems.

Committee on Medical Preparedness.—Each society has, or should have, an alert and active Committee on Medical Preparedness. Such a committee may be classified as a major unit of the county medical society at this time. It constitutes the liaison between the local medical profession and the state and national organizations dealing with war activities. It must function efficiently. It must consist of members with sound judgment and courage.

Volunteer Assistance.—Officers and committeemen should not be expected to shoulder all the responsibility and all the work. They need the help of all members. This is especially true now. Organized effort means interest and action on the part of each member.

Assuring Constant Availability of Medical Care

Emergency Cases.—In several communities already medical societies or groups of physicians have set up plans designed to guarantee constant availability of medical care for emergency cases. These have been properly publicized to tell the people of the area that the profession is aware of its obligations and to forestall situa-

tions where it might not be possible to get a doctor when one is needed.

Responsibility Shared.—In principle the mechanics of these plans are similar. Generally, the responsibility for emergency calls at night is rotated among all participating physicians so that at given intervals a certain physician is charged with accepting all emergency night calls and those where the family physician cannot be located. In larger communities, the area thus covered is zoned, with different physicians responsible for different zones.

Central Call Station.—Usually, the plans for emergency services and zoning are administered through some central point such as a hospital, city health department, or the local physicians' switchboard service. Obviously, a central call station adds to the efficiency of the plan and should be maintained if at all possible.

Staggered Office Hours.—Besides providing constantly available services for emergency, several of the plans include mutual agreements for the staggering of office hours and days off, thus assuring their respective communities that a sufficient number of physicians are always on hand in the community.

Rotating Calls.—There are some suburban or outlying areas of semiresidential nature in which there are no physicians. These are potential sources of trouble even though the metropolitan areas of which they are a part have sufficient physicians. This situation has been met in several instances through a mutual agreement among physicians of the metropolitan area. Either they have agreed to rotate days actually spent in the communities in question, or they distribute among their group all calls from those communities. In extremely rural areas, it might be possible for physicians of towns adjacent to those without physicians, to arrange for holding office hours on certain days in the latter towns, on a rotating basis. The question of charges and mileage must be considered.

Charges and Mileage.—Excessive charges for calls to outlying areas must be avoided. The physician is entitled to a reasonable fee for long trips but each should remember that these are times of emergency, not to be taken advantage of. Necessary services must be provided for all areas. This will break down if the costs are excessive. Here is where the physician can make a real contribution toward meeting problems arising from the emergency. Each county society would do well to consider immediately the problems of the outlying areas as they are potential sources of trouble.

Preventive Services.—As factors in reducing unnecessary demands for medical services and minimizing illness, preventive medical practices and health education have assumed added importance. The county medical society is the logical agency to assume leadership in fostering both. Preventive medical practices can be promoted in two ways: (1) The society as a group can actively cooperate with health officials and school authorities to further worthwhile programs of immunization and other preventive measures, or (2) the physician in private practice can tactfully recommend to his patients the various procedures he believes they should take to insure good health.

Health Education.—Education of the public in such fields as good nutrition and sound personal hygiene must be sustained at this time more than ever. Toward this end, the medical society should actively coöperate with acceptable health education and nutrition education agencies in the community. Press releases by local societies are desirable. The Bureau of Public Education of the State Medical Association is producing material of this kind and will assist local societies on request. Such releases also should advise the public how it can help in conserving the time of the physician working under emergency conditions.

COMMITTEE ON HOSPITALS, DISPENSARIES AND CLINICS

Los Angeles County General Hospital Changes Method of Collections

"Persecution" method in the collection of bills from needy people who use the general hospital were attacked this week by Supervisor John Anson Ford.

The board first sliced from 147 to 25 the number of chargeable items, then Ford said that was only the beginning.

"I have learned through investigation that a small minority of the people treated at the General Hospital are paying reasonably high fees, because they honestly wish to meet their obligations," said Ford.

"About $500,000 annually is collected from patients and their relatives, toward offsetting the $4,500,000 annual operating cost of the institution.

"Unfortunately this minority group of conscientious people who pay for services are billed at prices averaging higher than it costs the charity patient in many other California counties.

"Furthermore I intend to follow through on this policy matter and if possible eliminate the present practice of hounding and persecuting unfortunate people for payment of bills, which common sense indicates they would never have contracted if they could possibly afford treatment in private institutions."—Los Angeles *Eastside Journal*, January 20.

Riverside County Medical Men Ask Hospital Power

Medical Association Responds to Board's Invitation for Suggestions by Asking to Set Up Advisory Council of Doctors

The Riverside County Medical Association responded to the invitation of the Board of Supervisors extended by letter January 18, to make suggestions for the operation of the county hospital at any time. The association, through its officers, sent the following letter to the board on Monday. The letter stated that it was in answer to the invitation of the board and then made the following recommendations:

"1. That the Medical Superintendent be given complete charge of the operation of the hospital.

"2. That a hospital committee of five physicians, one from each supervisorial district, each to be an active member of the Riverside County Medical Association, be named to serve as a directing committee of the Riverside County Hospital.

"The members of this committee shall be appointed by the Board of Supervisors from an eligible list submitted as nominees to be selected at a regular meeting of such association, when requested by the Board of Supervisors, but in any event, at least once in each calendar year.

"The principal duties of the directing committee shall be the supervision and control of admittance; and recommendations as to policies of the hospital.

"A further duty of the committee will be the advising of the Board of Supervisors as to the selection of future superintendents for the hospital and as to hospital problems generally.

"3. That there be maintained and available at the hospital at all times, and subject to examination by the members of the hospital staff and directing committee of the hospital, an active up-to-date social service history of all patients of the hospital.

"These recommendations are submitted to your board for your consideration and it is our desire that an early action be taken and that we may be notified of such action in a reasonable length of time." The letter was signed by Thomas A. Card, president, and W. K. Templeton, secretary-treasurer.

The letter was filed without comment by board members, a procedure that usually indicates that the matter will be discussed in a closed session.—Riverside *News*, January 28.

Big Gains Shown at Riverside Community Hospital

In the face of growing shortages of nurses and doctors because of the demands of the armed forces, Riverside Community Hospital had 3,541 patients, an increase of 770 patients during its first wartime year over the 1941 total of 2,771, according to reports filed with the board of directors last night.

This was almost twice the volume of patients, 1,960, admitted in 1939. . . . —Riverside *Press*, January 19.

COUNTY SOCIETIES†

CHANGES IN MEMBERSHIP

New Members (70)

Alameda County (3)

Purcell, Edward, *Oakland*
Thorpe, M. W., *Hayward*
Zander, Charles H., *Oakland*

Los Angeles County (49)

Alpert, Clarence D., *Los Angeles*
Anderson, Lucille Russell, *Los Angeles*
Bluechel, Theodore John, *Rolling Hills*
Brokensiek, Clifton Mack, *Bellflower*
Brophy, Truman W., III., *Los Angeles*
Chrisman, William D., *Lynwood*
Cooley, Arthur Dike, *San Pedro*
Couperus, Molleurus, *Los Angeles*
Curtis, Charles Havelock, *Los Angeles*
Daniells, Jr., Arthur G., *South Gate*
Dart, Edward E., *Los Angeles*
Dorsch, William A., *Compton*
Frankl, Julius, *Los Angeles*
Frazier, Frank P., *Bell*
Gandin, Morris M., *Los Angeles*
Gaspar, John Lambert, *Los Angeles*
Hallstone, Victor Everett, *Huntington Park*
Harvey, Andrew Magee, *Long Beach*
Hawkins, Jr., J. Lawrence, *Huntington Park*
Hoefer, Harold Francis, *Los Angeles*
Hustead, Edwin L., *Los Angeles*
Jones, Deward W., *Los Angeles*
Jones, Kenneth Paul, *San Fernando*
Kamins, Maurice Lloyd, *Los Angeles*
Keate, Wendell Snow, *Santa Monica*
Keller, Virginia Peck, *Glendale*
Kelso, Raymond A., *Los Angeles*
Keys, John A., *Manhattan Beach*
Levien, Nathaniel Irving, *Beverly Hills*
McGregor, Helen, *Huntington Park*
Mokler, Victor A., *Los Angeles*
Moore, Fred T., *Los Angeles*
Moran, Helen Christine, *South Pasadena*
Newkirk, Merlin Louis, *South Gate*
O'Flaherty, A. E., *West Los Angeles*
Palazzo, John R., *Los Angeles*
Perelson, Harold Nathan, *Huntington Park*
Peterson, John E., *Los Angeles*
Roberts, Chester Llewellyn, *Glendale*
Rubin, Henry Joel, *Los Angeles*
Schube, Purcell George, *Pasadena*
Sickafoose, Harry R., *Wilmington*
Snodgrass, Wilfred James, *Santa Monica*
Storkan, Joseph Charles, *Gardena*
Tennison, William James, *Arcadia*
Ward, Ernest Trulock, *Huntington Park*
Watkins, J. Frank, *Los Angeles*
Webster, Marion Terwilliger, *Inglewood*
Works, Royal Leone, *Los Angeles*

Orange County (2)

Page, Harlan, *Laguna Beach*
Thompson, Floyd F., *Santa Ana*

San Bernardino County (2)

Dunsmoor, R. M., *Fontana*
Sprague, Charles P., *San Bernardino*

San Diego County (4)

Ballard, M. D., *San Diego*
LeMarquis, Antionette Y., *San Diego*
Martin, Worthington Lee, *San Diego*
McCracken, Robert H., *San Diego*

San Francisco County (8)

Albrecht, Joseph J., *San Francisco*
Johanson, Raymond Richard, *San Francisco*
McClure, Joy L., *San Francisco*
Melvin, Harry A., *San Francisco*
Mohr, Jr., Selby Rudolph, *San Francisco*
Mottram, Martha Elizabeth, *San Francisco*
Movitt, Eli Rodin, *San Francisco*
Pasqualetti, Roy Antone, *San Francisco*

San Mateo County (1)

Kading, Earl C., *San Mateo*

Santa Clara County (1)

McGinty, Arthur T., *San Jose*

Transfers (2)

Van Atta, Margaret A., from Los Angeles County to San Diego County
Wood, Dorothy A., from San Francisco County to San Mateo County

† For roster of officers of component county medical societies, see page 4 in front advertising section.

In Memoriam

Browne, George Cecil. Died at Oakland, January 20, 1943, age 65. Graduate of the College of Physicians and Surgeons of Baltimore, Maryland, 1899. Licensed in California in 1899. Doctor Browne was a member of the Alameda County Medical Association, the California Medical Association, and the American Medical Association.

✠

Giannini, Attilio H. Died at Los Angeles, February 7, 1943, age 68. Graduate of the University of California Medical School, San Francisco, 1896. Licensed in California in 1896. Doctor Giannini was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

✠

Schulze, Margaret. Died at San Francisco, February 7, 1943, age 48. Graduate of the University of California Medical School, San Francisco, 1916. Licensed in California in 1916. Doctor Schulze was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

✠

Wise, Philip L. Died at San Jose, January 8, 1943, age 63. Graduate of the University of Southern California School of Medicine, 1905. Licensed in California in 1905. Doctor Wise was a member of the Santa Clara County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

"And in the end, through the long ages of our quest for light, it will be found that truth is still mightier than the sword. Because out of all the welter of human carnage and human sorrow and human weal the one great indestructible thing that will always live on is a sound idea."—Gen. Douglas MacArthur.

THE WOMAN'S AUXILIARY TO THE CALIFORNIA MEDICAL ASSOCIATION†

MRS. F. G. LINDEMULDER.....President
MRS. RENE VAN DE CARR.....Chairman on Publicity
MRS. ROSSNER GRAHAM..Asst. Chairman on Publicity

State News

The Spring meeting of the State Board was held at Chapman Park Hotel in Los Angeles, on February 12, at 10 a.m. The Executive Board met at 9 o'clock, Mrs. F. G. Lindemulder, President, in the chair. State Board members were welcomed by a committee from the Los Angeles Auxiliary. Among events planned were a special luncheon at the Hotel and a Red Cross tour in the afternoon. The Nominating Committee met in the Hotel the night before, when Mrs. Randall Madelay presided as chairman.

There were three District meetings in January: San Francisco, January 12, when four Auxiliaries participated; Santa Cruz, January 13, when three Auxiliaries were represented, and Santa Barbara, January 14, with two Auxiliaries participating. All of these meetings, well attended, were interesting, and lively discussions resulted.

County News Items

With a desire to further serve humanity, the members of the Woman's Auxiliary to the San Francisco County Medical Society held a day for their membership at the Irwin Memorial Blood Bank, 2180 Washington Street, Monday, February 1, to donate their blood for Whole Blood and Blood Plasma for use in local hospitals, and to build a reserve supply in case of enemy attack or any other disaster.

The Irwin Memorial Blood Bank operates under the direction of the County Medical Society, and, as a project, the members of the Auxiliary entirely staff the following departments: Couriers, drivers of the Blood Bank station wagon delivery service, and Canteen Corps. These volunteers work six days a week, from 8 a.m. to 6 p.m. This service has been in operation for the past year.

The Telephone Committee, under the direction of Mrs. Frank Hand, contacted the membership to make appointments and furnish all necessary information. Members were asked to give the usual pint of blood needed for adult transfusions, or a portion of a pint for infant transfusions, a unique service of the Irwin Memorial Blood Bank.

The San Francisco group holds no regular meeting in February, but preparations are under way for an especially fine program for the March meeting.

On January 8, the members of the Monterey County Auxiliary met at the home of Mrs. Rollin Reeves in Salinas, for a combined social and business session. Mrs. Walter Farr was named Chairman of the Nominating Committee.

Mrs. F. G. Lindemulder, State President, attended a joint meeting of the Monterey, Santa Cruz, and Santa Clara County Auxiliaries. Ways and means, to meet the current problems imposed by wartime conditions and the continuance of meetings during the duration, were discussed.

Monterey and San Benito County Medical Auxiliaries meet separately in their own communities, due to the gas and tire rationing.

The Humboldt County Auxiliary met at the home of Mrs. Walter Dolfini on January 14. As the dimout restrictions make it increasingly more difficult to attend evening meetings, it was decided to have alternate meetings in the afternoons instead of the usual evening meetings.

Mrs. Joseph Walsh has been appointed to contact the local U.S.O. regarding specific articles to be supplied by the Auxiliary during the current year.

On January 10, the Riverside County Medical Auxiliary met at the Riverside Community Hospital. Mrs. Wayne Templeton, President, opened the meeting with a prayer for the success of the armed forces of the United States. A list of the Riverside County Medical Society members in the Service was read.

Mrs. Ralph Smith, *Hygeia* Chairman, reported that 45 subscriptions to *Hygeia* had been ordered for distribution to schools and other public places, as a result of the recent benefit party staged by the Auxiliary.

An important matter discussed at the January meeting of the Auxiliary to the Sacramento Society for Medical Improvement was the method of raising monies for the annual contribution to the Medical Benevolent Fund. Sacramento County Auxiliary has received special recognition in the past for their generosity in contributing to this Fund.

Another project of this group is the making of layette garments for the Fairhaven Home. Used garments for babies and mothers in the Home were collected at the January meeting. Hostesses were Mrs. Dave Dozier, Mrs. Edward Babcock, Mrs. Gandolpho Prisinzano, Mrs. William S. Harding and Mrs. John Lawson.

The Alameda County regular luncheon-meeting was held at the Claremont Country Club on February 19, with Mrs. T. Floyd Bell presiding.

The third Tuesday of each month, Alameda County members take over Hospitality House and serve during the day and evening. All food is donated by members. Mrs. Rossner Graham, Hospitality House Chairman, has announced that cash contributions during January totaled forty-five dollars. This was gratefully received by those in charge, as the fund necessary to carry on this work is dependent on the voluntary contributions of members.

† Prior to the tenth of each month, reports of county chairmen on publicity should be sent to Mrs. Rene Van de Carr, 51 Prospect Road, Piedmont. For roster of state and county officers, see page 6, in front advertising section.

CALIFORNIA PHYSICIANS' SERVICE†

Beneficiary Membership

Commercial (January)	35,000
Rural Health Program	5,000
War Housing Projects (February 1) (Approximate)	35,000
Marin	5,000
Los Angeles	7,000
San Diego	10,000
Vallejo	13,000

† Address: California Physicians' Service, 153 Kearny Street, San Francisco. Telephone EXbrook 0161. A. E. Larsen, M. D., Secretary.

Copy for the California Physicians' Service department in the OFFICIAL JOURNAL is submitted by that organization.

For roster of nonprofit hospitalization associates in California, see in front advertising section on page 3, bottom left-hand column.

Our extension of the Rural Program has not been as rapid as we had hoped, although approximately 400 new families were enrolled as of January 1st. We expect to extend this program still further in the coming months.

Steps are being taken to develop a program to meet the needs of counties in Northern California, particularly to cover the employees of lumber camps, mines, etc. We hope to institute this activity beginning with the first of April, and believe that the program will be successful from all viewpoints.

The progess of converting the full coverage to the two visit deductible is approximately 50 per cent complete. According to our present rate of progress, this program should be completed in the late spring or early summer. The effects of the change are already becoming noticeable. There has been a fairly steady increase in the unit value, reaching a top of $1.50 per unit for services rendered in the month of December. The rate of $1.50 payable for December, 1942, compares very favorably with the rate of $1.10 paid per unit for the month of December, 1941.

FSA Health Insurance Plan Offered Santa Clara County Farmers

For the first time Santa Clara valley farmers will have an opportunity to subscribe to the Farm Security Administration-California Physicians' Service sponsored health insurance plan.

The program, designed especially for rural families of California, offers medical, surgical and hospital care for just a few cents a day per person, according to G. L. Taggart, head of the FSA office in San Jose.

Coöperative Plan

It is a coöperative plan whereby farm families with low cash incomes can be assured of needed medical service. The plan is available for all FSA borrowers and other farm families in the county whose annual net incomes for state income tax purposes are $2,000 or less.

Medical benefits include all medical services that may be necessary as a consequence of illness or injury and all necessary obstetrical care, in the office of a CPS professional member, in the home when necessary or in a hospital if necessary.

Covers All Ailments

All x-ray and laboratory examinations necessary in the opinion of the attending physician, or specialist services are covered by the insurance plan.

The service also includes treatment of chronic ailments that are contagious, infectious or painful and obstetrical services, Taggart emphasized.

Annual dues for the Santa Clara County Farmers' Health Association are $20 for one adult member; $40 for one adult and one child or two adults; $50 for two adults and one child, or one adult and two children, and $60 for three adults or four or more persons.

Handled Locally

All applications to join the Health Association must be filed at the local FSA office, 503 Burrell Building, San Jose, before February 15. . . .

Farmers who do not have the ready money for annual dues, but who want to secure the benefits of this program are urged to call at the FSA office, which may be able to assist in the necessary financing, Taggart said.—San Jose *Mercury Herald*, January 24.

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50 Families in Tulare County Health Association

Formation of the Tulare County Health Association was completed at a meeting in the Visalia Civic Auditorium, Thursday evening. About fifty charter member families attended and passed on the by-laws and contract with the California Physicians' Service. A board of supervisors was appointed and medical benefits will begin on March 1, 1943.

Applications for membership will be closed for one year after February 14, 1943. The temporary address of the association, for new applications, will be at 129 East Center Street in Visalia. Any farm family, providing that not more than 50 per cent of the family annual income is derived from farming or farm labor may join, if the net family income is $2,000 or less. . . . —Lindsay *News*, January 19.

MEDICAL EPONYMS

Sahli Hemometer

The hemometer was first described by Professor Herman Sahli (1856-1933), of Bern, in a paper, entitled "Über ein einfaches und exactes Verfahren der klinischen Hämometrie [A Simple and Exact Method of Clinical Hemometry]," which was read at the Twentieth Congress for Internal Medicine in April, 1902. The article appeared in *Verhandlungen des Congresses für Innere Medicin* (20:230-234, 1902). A portion of the translation follows:

"After numerous attempts, I have succeeded in finding a method of converting the hemoglobin in a solution of blood into a derivative, by means of a very simple reaction, whereby stable standard solutions can be prepared and colorimetric determinations carried out. . . . The method consists simply in adding to the blood ten times the amount of one-tenth normal hydrochloric acid. After a few seconds, the solution turns deep brown and becomes a clear, brownish yellow after dilution with ordinary water. The pigment content may be colorimetrically determined by means of a similar standard solution, which can be so made as to be completely stable."—

* * *

Shiga-Flexner Bacillus

Kiyoshi Shiga (b. 1870), while assistant at Kitasato's Institute for Infectious Diseases, summarized his conclusions in regard to the bacillus of dysentery in an article, entitled "Ueber den Erreger der Dysenterie in Japan [The Casual Agent of Dysentery in Japan]," dated at Tokio, December 10, 1897. It was published in the *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten* (*Abt.* I—23:599, 1898). He speaks of the failures of other investigators who had made use of animal experimentation, attributing this to the fact that most experimental animals are not susceptible to human dysentery. A portion of the translation follows:

"On this account, following the suggestion of Professor Kitasato, I have investigated the subject of dysentery from another angle, namely, as follows: The question arises whether one may not find a microörganism in the stools of patients suffering with dysentery which will show an agglutinating reaction with their blood serum, such as Widal first demonstrated with typhoid bacilli and the serum of patients suffering with typhoid fever. I have made careful bacteriologic examinations of the stools and internal organs of 36 cases of dysentery, and have constantly found one and the same bacillus, which showed a clear-cut agglutinating reaction in the presence of serum of patients with dysentery. . . . I believe that we may probably consider this bacillus as the cause of dysentery."

He describes the cultural characteristics of the organism and further states that the serum of a person injected with the dead culture likewise shows the agglutinating reaction.

On April 12, 1900, Dr. Simon Flexner (b. 1863), professor of pathology at the University of Pennsylvania, delivered a lecture before the New York Pathological Society, entitled "On the Etiology of Tropical Dysentery." This was published in the *Bulletin of the Johns Hopkins Hospital* (11:231-242, 1900). After an exhaustive account of his investigations and a complete review of the symptomatology, bacteriology and pathology of tropical dysentery, including reference to Shiga's work, he concludes:

"I think I have shown that tropical dysentery consists of a bacillary and an amebic form, separable in their early and their later stages by their clinical histories, their etiology and pathological anatomy."—R. W. B., in *New England Journal of Medicine.*

MISCELLANY

Under this department are ordinarily grouped: News Items; Letters; Special Articles; Twenty-Five Years Ago column; California Board of Medical Examiners; and other columns as occasion may warrant. Items for News column must be furnished by the fifteenth of the preceding month. For Book Reviews, see index on the front cover, under Miscellany.

NEWS

Coming Meetings†

California Medical Association, Hotel Biltmore, Los Angeles, on Sunday, May 2—Monday, May 3, 1942.

American Medical Association. No meetings of Scientific Assembly. Meeting of House of Delegates will be held in Chicago, on Monday, June 7, 1943.

The Platform of the American Medical Association

The American Medical Association advocates:

1. *The establishment of an agency of Federal Government under which shall be coördinated and administered all medical and health functions of the Federal Government, exclusive of those of the Army and Navy.*

2. *The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health, and the care of the sick on proof of such need.*

3. *The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.*

4. *The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.*

5. *The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.*

6. *In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.*

7. *The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.*

8. *Expansion of public health and medical services consistent with the American system of democracy.*

Medical Broadcasts*

The Los Angeles County Medical Association:

The following is the Los Angeles County Medical Association's radio broadcast schedule for the current month, all broadcasts being given on Saturdays.

KFAC presents the Saturday programs at 8:45 a. m., under the title "Your Doctor and You."

In March, KFAC will present these broadcasts on the following Saturdays: March 6, 13, 20, and 27.

The Saturday broadcasts of KECA are given at 10:30 a. m., under the title "The Road of Health."

† In the front advertising section of *The Journal of the American Medical Association,* various rosters of national officers and organizations appear each week, each list being printed about every fourth week.

* County societies giving medical broadcasts are requested to send information as soon as arranged.

Charles B. Pinkham, M.D., Retiring Secretary of the California State Board of Medical Examiners. (For editorial comment, see February C. and W. M., on page 58.)

Pharmacological Items of Potential Interest to Clinicians*:

1. *Cancer:* A. Taylor announces successful production of a mammalian tumor by a virus-like principle grown on egg yolk (*Science,* 97:123, Jan. 29, 1943). J. J. Biesele, H. Poyner and T. S. Painter describe nuclear phenomena in mouse cancers (*Univ. Texas Publ.,* 4243, 1942). Most important and impressive is E. S. Sundstroem and G. Michaels' *Adrenal Cortex in Adaptation to Altitude, Climate and Cancer* (Univ. Calif. Mem., Berkeley, 1942, 409 pp. in 4to), which would have made a score of hot journal articles. Proceedings Amer. Assoc. Cancer Research appear in Feb. issue, *Cancer Res.,* (3:120, 1943).

2. *Historical:* Congratulations to J. H. Gaddum on succeeding to the great chair of pharmacology at Edinburgh. He gracefully reviews the development of materia medica there (*Edin. Med. J.,* 49:721, Dec., 1942). H. B. Adelmann edits the *Embryological Treatises of Hierony-*

* These items submitted by Chauncey D. Leake, formerly Director of U. C. Pharmacologic Laboratory, now Dean of University of Texas Medical School.

mous Fabricius of Aquapendente (Cornell Univ. Press, 1943). John Fulton prepares Harvey Cushing's Vesalian Notes for the quatrocentennial. John Saunders likewise has ready an annotated translation of the Vesalian *China Root*. The History of Science Society needs your support: Dues $5.00 per year bring *Isis*; remit to A. Pogo, Harvard Library 187, Cambridge, Mass.; it's needed for our culture. J. J. Izquierdo brilliantly describes the Zachheim murals on California's Medical History at the Univ. California Medical Center, San Francisco (Mexico City, 1942).

3. *Books*: B. Harrow's *Biochemistry* (3rd Ed., Saunders, Phila., 1943), looks good. C. C. Thomas issues I. G. Macy's *Nutrition and Chemical Growth in Childhood*. The Interscience Publications furnish E. Gellhorn's *Autonomic Regulations* and W. C. Boyd's *Fundamentals of Immunology*. From Columbia Univ. Press comes E. Mayer's *Systematics and the Origin of Species*. Fisher Unwin (London), issue the remarkable discussion aroused by C. H. Waddington on *Science and Ethics*, in which the Bishop of Birmingham, the Dean of St. Paul's, J. Huxley and yours faithfully participate. From the Univ. of Minnesota Press comes C. M. Christensen's *Common Edible Mushrooms*. Wms. & Wilkins (Balt.), issue D. Rapaport's *Emotions and Memory*. Cattell Press (Lancaster), puts out Vols. 8 and 9 of *Biological Symposia;* R. Redfield's *Levels of Integration in Biological and Social Systems*, and F. C. Koch and P. E. Smith's *Sex Hormones*. Vol. 10 Cold Spring Harbor Symposia appears: *Relation of Hormones to Development*.

4. *Radioactive Elements:* C. Pecher's posthumous classic on the biological effects of radioactive calcium and strontium with a clinical report on their use in bone tumor finally appears (*Univ. Calif. Pub. Pharmacol.*, 2:117, 1942). M. E. Morton and I. L. Chaikoff observe *in vitro* formation of thyroxin by thyroid tissue with radioactive iodine as an indicator (*J. Biol. Chem.*, 147:1, 1943). Symposium on trace elements in relation to health in summarized in *Nature* (151:28, Jan. 2, 1943).

5. *Ends and Odds:* G. G. Villela (*Mem. Inst. O. Cruz*, 37:427, 1942), shows normal urinary excretion of riboflavin varies between 76 and 1300 microg. per day. Sulphonamide resistance in gonorrhea is reviewed by J. Petro (*Lancet*, 1:35, Jan. 9, 1943). L. R. Dragstedt, et al, report on antagonistic effects of lipocaic and anterior pituitary on fat metabolism (*Am. J. Physiol.*, 138:264, 1943). R. L. Noble claims to have produced resistance in rats to amounts of trauma usually fatal (*Ibid.*, p. 346). J. Bronfrenbrenner discusses physical and chemical agents in allergy (*J. Allergy*, 14:105, 1943). R. Granit proposes a physiological theory of color perception (*Nature*, 151:9, Jan. 2, 1943). N. East's Chadwick Lecture on Prevention and Treatment of Anti-Social Behavior is reviewed in *Nature* (151:9, Jan. 2, 1943). P. G. Fuerstner shows reaction of tubes and ovaries to induced vascular spasm (*Univ. Calif. Pub. Pharmacol.*, 2:105, 1942). D. Burk and R. J. Winzler write on vitamers of biotin (*Science*, 97:57, Jan. 15, 1943). J. H. Sandground notes that p-amino benzoic acid reduces toxicity of old pal carbarsone (USP XII!), and similar arsenicals (*Science*, 97:73, Jan. 15, 1943). R. H. Abrahamson and J. W. Hinton discuss the significance of gastric mucosa as an endocrine gland in gastric carcinoma (S.G.&O., 76:147, 1943). Vol. 1 of a series on Effects of Alcohol on the Individual appears from Yale Press, and shows confusion on etiology of addiction.

Erratum.—On page 34 of the January issue of CALIFORNIA AND WESTERN MEDICINE appeared a final vote on Proposition No. 3 (Basic Science Act). It was stated that only three counties cast more votes in favor than against the measure. This was in error, because San Benito County also voted in favor of the Basic Science Act; 1,209 votes being cast in favor thereof and 1,129 ballots against, a difference of 80 in favor of the Act.

Pasadenan Appointed State Health Officer

Dr. Wilton L. Halverson, former Pasadena City Health Officer and for the past year and a half Los Angeles County Health Officer, last night accepted Governor-elect Earl Warren's appointment as State Director of Public Health and said he would probably take over his new duties before the end of January. In announcing the appointment, Warren called Dr. Halverson "one of the outstanding public health men in the country." He has been Los Angeles County public health officer since 1940 and previously was public health officer of Pasadena for seven years. His salary of $6,000 a year will be less than he received in Los Angeles County. He replaces Dr. Bertram Brown, a Hollywood physician....

Born in Litchfield, Minn., June 30, 1896, Dr. Halverson received his bachelor of arts degree from Union College, Nebraska, in 1919. After four years of teaching history at Shelton Academy, Neb., he secured his M. D. at the College of Medical Evangelists.

Studied Many Departments

Through a Rockefeller traveling fellowship grant Dr. Halverson visited and studied many of the best health departments in the United States in 1932. The degree of doctor of public health was conferred on him following completion of a thesis on the subject in which he had become an authority.—Pasadena *Post*, January 5.

S. F. Milk Law Defended Before Supreme Court

Washington, Dec. 17.—(AP.)—Constitutionality of a San Francisco ordinance requiring the pasteurization of all milk sold for human consumption in the city, except certified milk, was defended today before the Supreme Court on the ground that it promoted health.

Henry Heidelberg, deputy city attorney of San Francisco, also contended that the Natural Milk Producers Association of California had no right to challenge the ordinance because the organization had never engaged in the production or distribution of milk in the city.

Other Cities Watching

Describing the Association as a "sort of chamber of commerce of raw milk producers," the attorney said it wanted some edict from this court that will prevent pasteurization ordinances.

"If the decision of the California Supreme Court sustaining this ordinance is affirmed," Heidelberg asserted, "Los Angeles and many other cities will pass pasteurization ordinances at once."

Members of the court displayed interest in a statement by Heidelberg that the San Francisco Medical Milk Commission, which supervised the production of certified milk, had ordered in January, 1939, that all certified milk be pasteurized and had then gone out of existence.

Pasteurization

The effect of this action, the attorney said, was to require that all milk sold in San Francisco for human consumption be pasteurized.

Philip S. Ehrlich, counsel for the Producers' Association, told the tribunal that this action by the Medical Commission was taken at a "secret meeting" and constituted "star chamber proceedings."

"I didn't know anything about it until last Monday," he asserted.—San Francisco *Examiner*, December 18.

New State Director of Institutions

Examiner Bureau, Sacramento, Dec. 28.—Governor-elect Earl Warren today named a second woman to a high position in his forthcoming administration, selecting Mrs. Dora Shaw Heffner of Los Angeles to be State director of institutions.

Mrs. Heffner takes over the $6,000 a year position now held by Dr. F. O. Butler, medical superintendent of the Sonoma State Home, who has been serving as acting director since the resignation of Dr. Aaron H. Rosanoff. . . .—San Francisco *Examiner*, December 29.

Sterilization Operation Plea Raises Shasta Legal Issue

Redding (Shasta Co.), Dec. 11.—District Attorney Laurence W. Carr disclosed today he has been asked by the Shasta County Board of Supervisors to decide on the legality of a sterilization operation on an indigent Shasta County woman in the county hospital.

Carr was informed, he said, the woman, mother of more than a dozen children, had consented to have the operation performed at the county hospital, but Dr. W. L. Bell, county physician, refused to perform the surgery on the ground it is against the law. The woman receives indigent aid here.

Carr said he is studying the law and probably will ask the State's Attorney General for a ruling.

The district attorney said there are two questions of law to be decided: whether the operation is lawful and whether the board of supervisors has the authority to offer such service to an indigent.—Sacramento *Bee*, December 11.

Press Clippings.—Some news items from the daily press on matters related to medical practice follow:

The Doctor Shortage

Everyone is interested in the so-called doctor shortage occasioned by the enlistment of such a large number in the armed forces of the nation. So far as it can be authentically ascertained, the situation has not become critical in California and steps are being taken to guard against a lack of medical service to the civilian population.

Chico has lost its full share of doctors and those left are being worked nearly up to their capacity. The public is being well served.

A survey just completed by the California Medical Association shows that with few exceptions the communities of this State have enough doctors still in practice to give the civilian population adequate medical care. There are some cities and some rural areas where additional doctors are needed but the relocation of twenty doctors, at the outside, would bring the medical population up to standard in these cases. Dr. Karl L. Shaupp, president-elect of the California Medical Association, announces that the Association expects to handle this relocation work within the next few months. He says that of the State's fifty-eight counties, the association's record shows that only six present any problem because of lack of enough doctors, and only four of these actually need more doctors today and an even dozen could handle these needs. California not only has enough doctors today but it is one of five states in the country still enjoying the luxury of a medical surplus.

In some areas the doctors are pooling their services for emergency medical service. Some districts are being covered by doctors from neighboring cities. In practically all cases the doctors are putting in longer hours and doing more work than they were accustomed to in peacetime.

Assurance is given by Dr. Schaupp that all California will be taken care of in good order by the available doctors.—Chico *Record*, January 23.

My Day—Health Plan For Many

I doubt very much whether we have ever developed the type of medical service which will eventually be useful in China. We are still groping to discover the best ways of reaching our people, all of our people, that is to say, with good medical care.

I received a letter the other day inclosing an article which describes the Group Health Coöperatives, Incorporated. This is a nonprofit medical service corporation in New York City. It is a health insurance plan under which 2,500 physicians in all fields of medicine and surgery offer their services to subscribers at an average cost of two-and-one quarter cents a day.

The basic annual cost to an individual is $9.60 and $24 paid by a family offers surgical care in any hospital, in the doctor's office, or the subscriber's home. It also covers obstetrical care at home or at any hospital, or for any illness not requiring surgical or obstetrical care. This plan, of course, is designed for people with incomes from $1,800 to $3,000. Under certain circumstances, people pay additional amounts for services outside those specified.

Germany was the originator of the insurance principle many years ago. Then Great Britain followed, accepting this as the best method of incorporating Government interest on low income groups as to health and employment. We seem to be following this lead, but there is also the possibility that the need might be met through taxation. It seems to me that a direct health tax bill for all might be a more democratic way of achieving the same results. In any case, I hope we shall examine various ways before making any one of them universal.—E. R.—San Francisco *News*, January 30.

Doctors Urge Food, Not Pills

Although recognizing the value of vitamin preparations, the council on foods and nutrition and the council on industrial health of the American Medical Association recently expressed their disapproval of the mass, indiscriminate administration of vitamins to industrial workers, and suggested that a program aimed at securing industrial health must be based on a proper diet of natural foods.—San Francisco *Pacific Coast Review*, February.

Fresno Doctor Gets State Post: Board of Medical Examiners

Governor Earl Warren today appointed Dr. J. R. Walker, Fresno eye, nose and throat specialist, a member of the state board of medical examiners for a four year term.

Dr. Walker, associated with his brothers, Drs. G. W. and B. F. Walker, has practiced in Fresno since 1902. He is a former president of the Fresno County Medical Society. . . .

He succeeds Dr. W. A. Swim of Los Angeles, whose term expired. Warren has one more appointment to make on the board to fill the post vacated by the expiration of the term of Dr. Fred R. DeLappe of Modesto.—Fresno *Bee*, February 4.

Sex Control in Animal Births Partly Achieved

Chicago, Jan. 29.—(UP.)—The *Journal* of the American Medical Association said today that man can cause males or females to be born at will among some of the lower animals.

Recent research on controlling sex, the *Journal* said, has partly solved a problem that has fascinated mankind since antiquity.

The *Journal* cited experiments by John W. Gowen, and Ronald H. Nelson with a species of fly in which the sex of the offspring "was completely controlled so that 100 per cent males or 100 per cent females could be produced at will."

This, it said, "does establish for the first time on a scientific basis the fact that this can be done experimentally among lower animals by man-devised methods."

The experiments were made with a species of fly known as drosophila, among which is the common fruit fly. The species has been used extensively to study the inheritance of characters and the mechanism of heredity.

"This startling discovery," the *Journal* said, "does not, of course, signify that it will be possible in the foreseeable future for parents to choose in advance the sex of their children."—Oakland *Tribune*, January 29.

U. S. Social Insurance

Chairman Altmeyer Urges Greater Security Benefits

Washington, Jan. 1.—(AP.)—Immediate expansion of the social program to cover all workers, increase benefits under the program now in effect and provide new types of social insurance was urged today by Chairman Arthur J. Altmeyer of the Social Security Board.

Altmeyer, in an article appearing in the board's monthly publication, suggested these three new types of protection:

1. Benefits for permanently disabled workers and for their dependents, irrespective of the worker's age and generally similar in amount to old-age benefits.

2. Benefits for workers temporarily disabled through illness or injury and for their dependents, payable for a limited number of months and more or less similar in amount to unemployment benefits.

3. Payments with respect to hospitalization costs incurred by insured workers or dependents.

These and other suggestions advanced by Altmeyer correspond to recommendations reportedly put before President Roosevelt by the National Resources Planning Board and possibly foreshadow a Presidential message to Congress calling for extension of the social insurance system.

Altmeyer advocated that social insurance coverage be extended to farm labor, domestic servants, seamen, those working in small firms or working for the Government or nonprofit organizations, and the person "who is in business or trade for himself."

"Expansion should provide, in addition, for more nearly adequate benefits under existing programs," he said, adding:

"This end could be achieved by increasing the maximum duration of unemployment benefits, shortening the waiting period, introducing dependents' allowances and increasing benefit amounts.

"An adjustment in the formula for computing old age benefits and a lower retirement age for women under old age survivors' insurance might also appropriately be included."

Altmeyer said that the expansion should be undertaken at once so a "well-rounded system" will be in operation when the war ends, and said it would have two advantages:

1. Protection for individuals and families against the loss of income after the war, "when a decline from the high levels of wartime production would increase greatly the incidence of risks leading to such losses."

2. "From the standpoint of the economic system as a whole, social insurance can aid in maintaining consumer purchasing power if national income exhibits a tendency to shrink and thus can assist in maintaining employment at higher levels."—San Francisco *Chronicle*, January 2.

Social Hygiene's War

While men armed with guns and bullets are fighting the war against our human enemies on the battle fronts, men armed with syringes, drugs and publicity are fighting the war against disease-breeding enemies on the home fronts. These latter men are the doctors, the health officers and the civilian, volunteer members of the American Social Hygiene Association, Inc. The enemies they are fighting, for the protection of our fighting men, are the twin venereal diseases, syphilis and gonorrhea.

All over America this is Social Hygiene Day, so designated to emphasize the battle to keep our armed forces and war workers clean of debilitating infection.

It is a furious and unrelenting fight. It must be waged in every sector where there is a chance of infection. It must include constant public education in the nature of the diseases and their prevention. It must contend against prejudice, ignorance, lust, professional vice and juvenile delinquency. Its fighters must be equipped with clinics for diagnosis and treatment. Its campaigns must be backed by liberal public funds.

Chancellor Ray L. Wilbur of Stanford University, president of the American Social Hygiene Association, said in an address at Buffalo Monday night: "The soldier fighting deadly venereal diseases living in his body fluids or tissues is a second-rater when it comes to fighting the enemies of his country." General John J. Pershing, commander of the AEF in 1917-18, said: "In the last World War venereal disease constituted by far the greatest single threat to the Army's efficiency and morale." In terms of winning the war what applies to the armed forces applies equally to the workers in war industries.

Surgeon General Thomas Parran of the U. S. Public Health Service, Secretary of the Navy Frank Knox and Secretary of War Henry L. Stimson all pay high praise to the American Social Hygiene Association for its work as the panzer division of this home front war.

California Chapters

Last year a San Francisco chapter of the association was formed to localize the fight in this important port of embarkation. Chapters also were established in Los Angeles and San Diego, all three under direction of the California Social Hygiene Association, a branch of the national organization.

In each of these chapters leading citizens have been enlisted as directors. A prime object is to create a public consciousness of the serious nature of the diseases, the preventive facilities available to combat them and support for local health authorities in waging constant war upon them.

Thus are the social taboos that so long suppressed all information about these scourges being broken down and the therapeutic light of reason, understanding and public approval being shed upon measures for their control and, possibly, their ultimate elimination.—San Francisco *News*, February 3.

Moderation, Health and Public Morals Improved in Nine Years

Nine years after repeal of prohibition the nation can count a trend toward moderation and an improvement of public health and morals, according to a survey of statistics assembled to mark the anniversary of repeal of the 18th Amendment.

In 1932, the last full year of prohibition, the crime rate was 1,645 per 100,000 population. Nine years later, the Federal Bureau of Investigation reported the gradual decrease in criminal cases had reached 1,581 per 100,000.

The U. S. Public Health Service says we, as a nation, are healthier than ever before. A report of the Metropolitan Life Insurance Company, issued at the end of the third quarter of 1942, states the year-to-date death rate for its many millions of policyholders is 7.4 per 1,000—an all-time low.

Government sources report that the health of the Army is also better than ever. The rate of Army hospital admissions for alcoholism for 1940, latest year available, was 2.7 per 1,000—a drop of 76 per cent since the peak prohibition year of 1922 when the rate was 11.5 per 1,000.

Reports from the Census Bureau show that the death rate from alcoholism has decreased more than 50 per cent since its prohibition peak in 1928 and in 1941 was 1.9 per 100,000 population.

The National Safety Council reports that deaths from traffic accidents measured against motor vehicle mileage declined 33 per cent since 1925.

The records of social and moral improvements, compiled from official sources by Brewing Industry Foundation, include a Federal report for 1941 showing that bootlegging seizures were reduced 73 per cent since 1929; arrests by Federal agents down 61 per cent. . . . —Maywood *S. E. Herald*, January 21.

TNT Poisoning in War Plants Drops

Cleveland (Science Service), Jan. 22.—American munitions plant workers are in less danger of TNT poisoning than munitions workers of 1917-18, it appears from the report of Dr. Lemuel C. McGee, medical director of the Hercules Powder Co., presented to the Congress of Industrial Health, sponsored by the American Medical Association.

"There is reason to believe," he said, "that recent refinements in methods of manufacture of TNT in America yield a purer product and afford less exposure to the operators than did the methods in vogue in World War I."

One protective device against TNT poisoning, he said, is to begin the shift on a full stomach.

Increased appetite and stomach distress simulating hunger are among the effects of TNT poisoning. Yellowing skin and inflammation are others. Most serious is liver damage, which may lead to death. Early diagnosis and removing the worker from contact with the chemical are essential for reducing mortality from TNT liver damage.—San Francisco *News*, January 22.

'No Medical Crisis in Sight'

Chicago, Dec. 31.—Dr. Morris Fishbein, editor of the *Journal* of the American Medical Association, said today American medical and public health services would continue to function efficiently and effectively through the war.

Writing in the magazine *Hygeia*, Fishbein said, "Fears of a breakdown in American medical and public health services are unwarranted by any evidence now available.

"Far more serious is the attempt to create such fears as a basis for political intrigues or manipulations for political power. That is a dangerous threat to national morale and public health.

"Public attention has been focused on the health of our people by the innumerable investigations of medical manpower. Fortunately the health of our people is now the best it has been in our history. Unless some epidemic, like that of 1918, should sweep the world, these excellent conditions should continue to prevail."—San Francisco *News*, December 31.

MEDICAL JURISPRUDENCE†

HARTLEY F. PEART, ESQ.
San Francisco

Malpractice: Necessity for Expert Testimony as to Propriety of Treatment by Diathermy

The question of first importance presented to the court in any action commenced by a patient against a physician and surgeon to recover damages for the alleged malpractice of the physician, is whether there has been a violation by the defendant physician of the standard of care established by the ordinary training and skill possessed and exercised by physicians and surgeons of good standing practicing in the same or similar communities. As a general rule, it is thoroughly settled in California that the determination of this standard of care, and the degree of skill which must be employed, as applied to and used in a given case, is solely within the knowledge of physicians and surgeons, and the testimony of experts is ordinarily indispensable to establish standards of good practice, and any departure therefrom by a physician or surgeon accused of malpractice. In the usual malpractice case, the patient charges the physician with having been negligent in diagnosis or treatment, and a prerequisite to the establishment of this charge is testimony by a qualified witness that, under the given circumstances, the conduct of the defendant physician was negligent in that it did not conform to standards of care employed by the medical profession.

An apt illustration of this principle is provided by the case of *Trindle v. Wheeler,* 56 A.C.A. 836, decided January 22, 1943, by the District Court of Appeal. The plaintiff in that case employed defendant, a physician and surgeon, to treat her sprained ankle. Defendant prescribed diathermy for the injury, and instructed the experienced and trained nurse assisting him to give the plaintiff a diathermy treatment on the ankle at 3,000 milliamperes for twenty minutes. The nurse placed folded towels on both sides of the ankle against which two electrodes rested. These were connected with the diathermy machine and were held in position by weights. There was nothing to prevent the plaintiff from removing the ankle from contact with the electrodes if the heat became painful. The machine was set in accordance with the physician's instructions and the nurse thereupon left the room. In her absence the diathermy machine increased from 3,000 to 3,500 milliamperes, and the plaintiff suffered burns as a result.

At the trial of the case, the defendant introduced evidence from reputable physicians using diathermy treatments in the locality showing the treatment given was proper for a sprained ankle, was properly administered in accordance with the best practices of the medical profession prevailing in the community, and constituted no departure from this standard of good practice. This evidence was not contradicted by any expert testimony presented on behalf of the plaintiff, but rather the patient attempted to justify her recovery of damages on the doctrine of *res ipsa loquitur* ("the thing speaks for itself"). That is, it was the plaintiff's contention that the mere establishment of the injury during a course of treatment administered by the defendant physician was sufficient to charge him with liability for any damaging results without the necessity of establishing negligence on his part by means of the expert testimony of other qualified persons. The court rejected plaintiff's contention, and ruled that in view of the uncontradicted testimony of defendant's witnesses, that the treatment prescribed, and the manner in which it was administered, were in accordance with the best standards of the medical profession, the plaintiff could not recover damages from the defendant physician in the absence of expert testimony affirmatively establishing the latter's negligence.

In so holding, the court discussed the doctrine of *res ipsa loquitur* in its relation to malpractice cases and recognized its applicability under certain circumstances. This doctrine is a rule of evidence which relieves the plaintiff in a court action of the burden of affirmatively proving the defendant's negligence. Where the doctrine is properly applicable, it is sufficient for the plaintiff to prove the occurrence of the injury which is the subject of the action, and that it occurred while the plaintiff was under the direction of or was receiving treatment from the defendant physician. In the *Trindle* case, the court pointed out the type of situation where the doctrine of *res ipsa loquitur* is properly brought into play, and restricted its application to those cases where scientific knowledge and training are, ordinarily speaking, not required to properly appraise the reasonableness and result of a given course of treatment. One general factual situation which warrants the application of this doctrine is where the action of a physician in treating a diseased or injured portion of a patient's body results in injury to another part of the body which prior to the treatment, was normal and healthy. To illustrate: prior California cases have applied the doctrine where a healthy tooth was knocked from the patient's jaw by the physician in preparing for a tonsillectomy, and again where the patient's uvula and soft palate were cut and damaged by a physician while performing a tonsillectomy. The doctrine has also been applied in cases somewhat similar to the *Trindle* case involving water-bottle or hot-compress burns suffered during postoperative care. As the court pointed out, in these cases the burns were on healthy portions of the patient's body and were not in the areas involved

† Editor's Note.—This department of CALIFORNIA AND WESTERN MEDICINE, presenting copy submitted by Hartley F. Peart, Esq., will contain excerpts from the syllabi of recent decisions and analyses of legal points and procedures of interest to the profession.

in the medical or surgical treatment. Where such an apparently unjustifiable injury occurs, it would seem reasonable to require the physician to explain the occurrence rather than putting the patient on proof of the defendant physician's negligence.

Applying this reasoning to *Trindle v. Wheeler*, the facts disclose that the burn occurred on the patient's ankle *which was the portion of the body undergoing treatment.* No presumption of negligence could arise from these facts which would excuse the plaintiff in the case from establishing the defendant physician's negligence by affirmative expert testimony given by competent physicians. In the words of the court: "As the necessity for and the method of the use of the diathermy machine in the treatment of a sprain is something that lies entirely outside the experience of the layman, we must conclude that plaintiff may not invoke the doctrine of *res ipsa loquitur* to aid her here." The judgment in favor of the defendant physician and surgeon was affirmed.

Training of Flight Surgeons

The plane is diving 400 miles an hour. The pilot has a split second to destroy his target. If he is physically or mentally only 87 per cent efficient, he is not good enough.

This is the reason for a new branch of medicine, that of the flight surgeon who keeps them fit to fight, taught here at the school of aviation medicine.

The doctors taking the course at Randolph Field in Texas are among America's finest. They will at times fly with their air squadrons, but they are not just flying doctors. Their job is not merely to keep fliers and crews healthy.

These skilled physicians are almost as important as the guns. On them depends whether an American youngster is going to be in shape to out think and out shoot his enemy—whether he will have the personal efficiency for split second decisions.

Altitude Brings Bends

Altitude causes strange body reactions. The drug which may pep a pilot for one task is almost sure to impair him for something else equally vital. Instead of pills and drugs, the flight surgeon is indoctrinated as a scientist, family doctor and personal friend for about three dozen airmen and their crews.

His job is to keep the kids calm, efficient, happy and eager during personal danger, private worries and fatigue the like of which other human beings never have faced, because no other fatigue strikes so fast.

All this never has been taught as one subject in medical colleges. The successful private physicians of yesterday come here to go back to school. Classes begin at 7 A.M. and last until 6 P.M. Interspersed are sections, laboratories and military drill two days a week so they can march like the boys they are going to care for.

Train Like Cadets

These men who for years have told others how to keep pain free enter the big, boiler shaped steel chamber in which, by pumping out the air, they go to a simulated altitude of 38,000 feet—the same as every cadet flier. That means the rarefied air of seven miles aloft, and it means aeroembolism for some—the airman's form of deep sea divers bends.

Aeroembolism begins around 30,000 feet. The doctors get it, and it hurts. It can be dangerous, but also the dangers can be avoided. Doctors take on the experience first hand in order to be able to convince the kids to take their advice.

Every six weeks a class of several hundred doctors is graduated. On Monday morning a new class marches in. The instructors work a fourteen hour day and afterward do some routine duties.

They learn the odd troubles that come from acceleration. The high speed military airmen whose plane swerves and bounces even a little is subjected to brief but high centrifugal pulls. The instructors teach subjects new, intricate and still puzzling to science, whose answers the air surgeons may help to get in future combat flights.

But most important, they teach the human touch of the old family doctor, whose patients are like his children.

'People Rely Too Much Upon Vitamin Capsules'

Chicago, Jan. 14.—(UP.)—Dr. Morris Fishbein, editor of the *Journal* of the American Medical Association, said today that Americans rely too much upon the use of vitamin capsules.

"Man is not made for a diet of pills and capsules," he said.

Dr. Fishbein said that even with stringent rationing the food supply is sufficient to permit everyone an adequate supply of vitamins A and C without taking vitamin capsules, if Americans choose and prepare their foods wisely.

Speaking before the industrial Congress of the American Medical Association, he said people waste enormous quantities of vitamins every day because "the exploitation of the use of vitamins has outstripped by far the knowledge on which such use is based."

The only sound nutrition, he said, depends primarily on proper selection, preparation, consumption and absorption of foods.

"Only by eating foods as a whole can we be certain to secure the necessary amounts of substances which may yet be unknown," he said.

"Americans who are the largest consumers of citrus fruits and tomato juice and who have great quantities of such materials still available, continue to take tablets and other preparations of vitamins, while England and Russia, which are definitely short of these substances, place requests through the lend-lease administration for millions of ounces of ascorbic acid (vitamin C)."

Dr. Fishbein advised government agencies concerned with post-war planning for needy nations, to quickly bring in the advice of scientific bodies to diagnose those nations' nutritional needs so that the treatments may be specific.

The use of vitamins as treatment for disease and certain forms of malnutrition or dietary deficiencies is wholly a professional problem, he said.

"An indiscriminate distribution of large quantities of food," he said, "is wasteful and will not solve the needs of the people concerned as will a scientific study of the primary deficiencies that exist."—San Francisco *News*, January 14.

Young Physicians Are Urged For Rural Areas

Ames (Iowa), Jan. 1.—(UP.)—According to Kaethe Mengleberg, Iowa State College economist, the Iowa farmer's doctor is considerably older than the medic of the city dweller.

Miss Mengleberg says a recent survey which she made shows that 31 per cent of the physicians in rural communities are 65 years of age or over in towns of less than 2,500 population. Only 16 per cent of the doctors in Iowa towns of more than 50,000 are in that age bracket.

In Des Moines, the report shows one-fifth of the doctors in 1940 were less than 35 years old. Only 14 per cent of the doctors in communities of less than 2,500 were under 35 in 1940. . . .—Sacramento *Bee*, January 1.

"Minorities are rich assets of democracy, assets which no totalitarian government can afford. For the majority itself is stimulated by the existence of minority groups. The human mind requires contrary expressions against which to test itself."—Wendell L. Willkie.

TWENTY-FIVE YEARS AGO†

EXCERPTS FROM OUR STATE MEDICAL JOURNAL

Vol. XVI, No. 3, March, 1918

EXCERPTS FROM EDITORIAL NOTES

Alarms and Rumors.—From time to time we hear that some member of our organization, who has been unfortunate enough to be sued for some alleged act of unskillfulness or neglectful omission, has suffered grievously at the hands of our organization. The story runs that the Secretary's office was indifferent or careless, or that our legal staff was ineffective and failed to respond to his dire need; or the yarn may be that our finances are impaired, that members are not keeping up their dues, and more and much more of the same. Prefacing the statement, "I heard" or "they say," our informant retails the depressing information. . . .

The point is this: When you hear or see any statement, oral or written, critical or derogatory of your own officers and representatives, do not circulate it, but take it up, either by seeing or writing to the officer or representative criticized, and, if not satisfied with his statement, then take it to the Councillor for your district and ask him to look into the matter for you. . . .

So, we say, criticize your officers and representatives —yes, but do so on facts known to you, and then go to some one in authority. Make your officers and representatives suggestions, they like to get them; but don't aid in the spreading of any rumor designed to disintegrate or weaken our splendid organization—and that, in the possible and probable interest of influences desiring such a result.

Medical Mobilization.—Until the entire medical profession of the United States, so far as its members are mentally and physically fit and within the age limit, is mobilized in the Medical Reserve Corps of the Army, we cannot say that we have done our utmost as a profession in the German war [Year, 1918]. . . .

It is not only for the combatant forces that medical officers are required, but for sanitation, hospital camps, cantonments and in other departments where the health and life of the forces are dependent upon the medical officer. . . .

EXCERPTS FROM ORIGINAL AND OTHER ARTICLES

From an Article on "The Work of the Medical Advisory Board for District Exemption Board, Division One, Northern California," by John Galkwey, M. D., San Francisco, Medical Member District Board, California. —On August 6, 1917, at the Capitol in Sacramento, a conference of the District Exemption Boards of California was held. The District Board of San Francisco and Alameda Counties was strongly of the opinion that reëxamination of men claiming physical disability as a basis of appeal, should be provided for by the District Exemption Boards. . . .

The value of the action of the conference of District Exemption Boards of California in providing for expert reëxamination of cases appealing on grounds of physical disability, has been established by the action of the Federal authorities in redistricting the whole country and appointing special boards for each district to continue

(Continued in Back Advertising Section, Page 30)

† This column strives to mirror the work and aims of colleagues who bore the brunt of Association activities some twenty-five years ago. It is hoped that such presentation will be of interest to both old and new members.

BOARD OF MEDICAL EXAMINERS OF THE STATE OF CALIFORNIA†

By CHARLES B. PINKHAM, M. D.
Secretary-Treasurer

News

"Governor Earl Warren today appointed Dr. J. B. Walker of Fresno to the State Board of Medical Examiners to replace Dr. W. A. Swim of Los Angeles, term expired. Doctor Walker, an eye specialist, is a member of the National Board of Ophthalmology, and was formerly president of the Fresno Board of Education. He serves until January 15, 1947." (San Francisco *Examiner,* February 5, 1943.)

"Dr. Nathan S. Housman, San Francisco physician who entered San Quentin prison thirteen months ago to serve a perjury term, was paroled yesterday by the State Board of Prison Terms and Paroles. The board, meeting at the prison, set Housman's indefinite term at five years, then granted an automatic parole effective after Housman has served eighteen months. The eighteen months will be reduced, however, by whatever prison 'good time' the board grants Housman, said Mark E. Noon, board secretary. This 'good time' has not yet been credited to him, but it could mean release for the doctor before Christmas. Housman went to prison at the end of a long and spectacular court struggle that began when a wealthy widow died, leaving a will designating him sole legatee. Out of an investigation of the death and the will grew a misdemeanor prosecution of Housman for failure to keep proper records of narcotics prescriptions. Housman won an acquittal, but out of his testimony grew the perjury charge and conviction. Housman cannot return to the practice of medicine because his license was revoked after the felony conviction. He has been working in the prison hospital." (San Francisco *Examiner,* December 10, 1942.)

" 'Dr.' Howard Whiteside, operator of a West Seventh Street healing establishment, today had been convicted of practicing medicine without a license by a jury in Municipal Judge Leroy Dawson's court. November 20 was set for probation hearing and sentence. Whiteside was specifically accused of diagnosing a case of two women state operatives, one of whom he said was suffering from a kidney ailment, from eating too much cake in her childhood. He offered to treat her for $150, she testified." (Los Angeles *Herald & Express,* November 14, 1942.)

"Charging that an East Bay cab driver last February drove him against his will to Morgan Hill, forced him to sign a check for $150 and beat him so severely he is still in a hospital, Dr. Thomas W. Welsh, Alameda physician, today filed a $31,000 damage suit in Alameda County Superior Court." (San Francisco *Call-Bulletin,* December 8, 1942.)

"Superior Judge Thomas M. Foley of San Francisco yesterday signed a judgment setting aside, cancelling and annulling action of the State Medical Board, and ordered the Board to issue a license to Dr. Willard S. Edmeades of Martinez. The order is a peremptory writ of mandate reversing the action of the Board in revoking Dr. Edmeades' license for an operation on Mrs. Lenore

(Continued in Back Advertising Section, Page 38)

† The office addresses of the California State Board of Medical Examiners are printed in the roster on advertising page 6. News items are submitted by the Secretary of the Board.